DISTRIBUTION OF FISH EGGS AND LARVAE, TEMPERATURE, AND SALINITY IN THE GEORGES BANK-GULF OF MAINE AREA, 1955



UNITED STATES DEPARTMENT OF THE INTERIOR, STEWART L. UDALL, SECRETARY
Fish and Wildlife Service, Clarence F. Pautzke, Commissioner
Bureau of Commercial Fisheries, Donald L. McKernan, Director

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Robert R. Marak, John B. Colton, Jr. and Donald B. Foster



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ABSTRACT

Basic data on the distribution of fish eggs and larvae in the Georges Bank-Gulf of Maine area were collected on surveys made by the Bureau of Commercial Fisheries research vessel Albatross III during the spring of 1955. The data are presented in tabular and graphic form. Plots and tables of surface temperature and salinity are also included.

INTRODUCTION

This is the second in a series of reports presenting basic data on fish egg and larvae surveys made on the research vessel Albatross III in the Georges Bank-Gulf of Maine area,

Information on the background of the surveys, objectives, methods, and procedures followed at sea and in the laboratory are given in the report for 1953 (Marak and Colton, 1961).

COLLECTION OF DATA

Four cruises were made during the spring of 1955: cruise no. 57, February 21 to March 2; cruise no. 58, March 19 to April 1; cruise no. 60, April 19 to May 2; cruise no. 61, May 16-28. The February cruise was added to the program this year because the data collected in 1953 showed that haddock spawning had begun earlier than March. These surveys were designed to cover the entire spawning period of haddock.

The procedure involved continuous towing of the Hardy Plankton Recorder³ (Hardy, 1936 and 1939) at the surface and 10 meters, bathythermograph lowerings, surface temperature and salinity observations, drift bottle releases, and surface tows with a 1-meter net⁴.

A list of the species of fish eggs and larvae (with species code letters used in the tables), collected during the 1955 survey cruises, is given in table 1.

Data for temperature and salinity observations in relation to 1-meter tows and Hardy Plankton Recorder gauze sections are given in tables 2-5.

The cruise plan and methods (Hardy Plankton Recorder, 1-meter net tows, and drift bottles) used aboard ship for the collection of data presented in this report are the same as those followed in the spring of 1953 (Marak and Colton, 1961).

Although slight changes were made in the track of the vessel (to make use of knowledge gained from the 1953 (cruises), the basic pattern and area covered were essentially

¹ Temporarily detailed to Bureau of Commercial Fisheries Biological Laboratory, Auke Bay, Alaska.

² Presently employed at the Woods Hole Oceanographic Institution, Woods Hole, Massachusetts.

³No. 3 silk was used in making the gauzes for the Hardy Plankton Recorder.

⁴No. 0 silk was used in the 1-meter net.

similar. Two Hardy Plankton Recorders were lost this year when the towing wire parted; one on cruise no. 57 on February 26, and the other on cruise no. 58 on March 30. Both instruments were being towed at 10 meters. Positions of drift bottle releases and recoveries for 1955 may be found in Bumpus and Day (1957).

LABORATORY EXAMINATION OF SAMPLES

One-Meter Net Tows and Hardy Plankton Recorder

Analysis of the data taken with the 1-meter net and Hardy Plankton Recorder during this year was carried out in the same manner as that presented in the first report (Marak and Colton, 1961). Figures 1-4 show the locations of 1-meter net tows and tables 6-9 give the data collected. The locations of individual gauze sections exposed by the Hardy Plankton Recorder are shown in figures 5-12 and the data obtained from these sections are given in tables 10-13. The section equivalent varied slightly with individual recorders and among distances covered (see tables 14-17). Because of the loss of Hardy Plankton Recorders on cruise no. 57 and cruise no. 58. data are lacking for part of these cruises. Actual locations of 1-meter tows and reference gauze sections are given in tables 2-5.

Temperature and Salinity

Surface temperatures were used in the graphic presentation in this report as they were generally found to be indicative of temperatures in the depths of water studied (surface and 10 meters). Figures 13-16 show the distribution of surface temperature with observed values rounded off to the nearest whole ⁰ F. In areas of rapid temperature

change (southern and southeast edge of Georges Bank) some isotherms were omitted to avoid confusion. Figures 1-4 show the distribution of surface salinity with observed figures rounded off to the nearest 0.5 %. Actual temperature and salinity figures may be found in tables 2-5.

Drift Bottles

A detailed analysis of the data obtained from the drift bottles released on these cruises made during the spring of 1955 has been reported by Day (1958).

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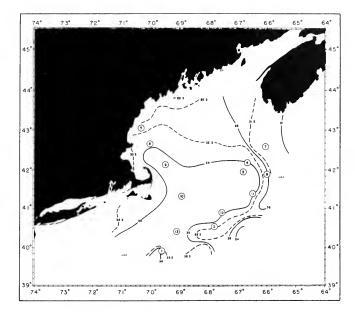


Figure 1.--Distribution of salinity and positions of 1-meter net tows, Albatross III cruise no. 57, February to March 2, 1955.

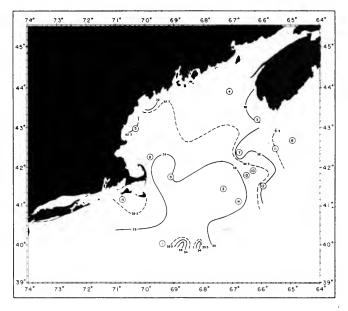


Figure 2,--Distribution of salinity and positions of 1-meter net tows,.

Albamoss III cruise no. 58, March 19 te April 1, 1965.

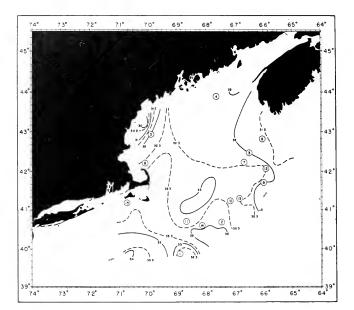


Figure 3.--Distribution of salinity and positions of 1-meter net tows, Albatross III cruise no. 60, April 19 to May 2, 1955.

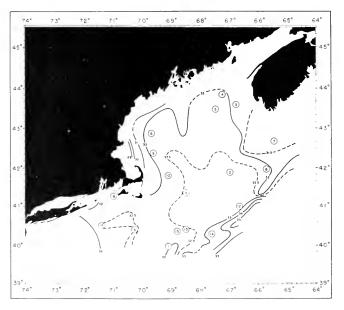


Figure 4.--Distribution of salinity and positions of 1-meter net tows, Albatross III cruise no. 61, May 16 to May 28, 1955.

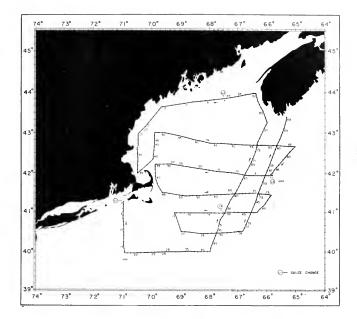


Figure 5.--Track of Albotross III cruise no. 57 (February 21 to March 2, 1955) giving positions for each gauze section of the surface Hardy Plankton Recorder.

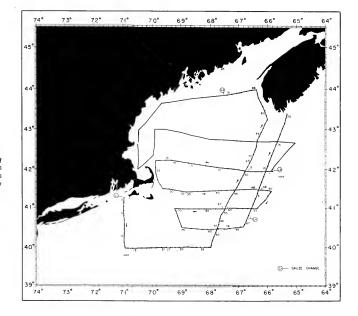


Figure 6.--Track of Albatross III cruise no. 57 (February 21 to March 2, 1955) giving positions for each gauze section of the 10-meter Hardy Plankton Recorder.

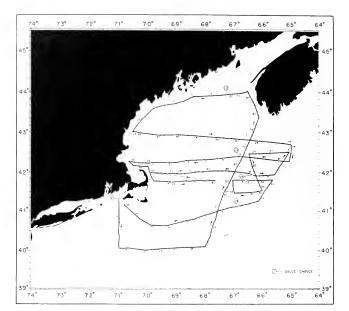


Figure 7.--Track of Albatross III cruise no. 58 (March 19 to April 1, 1955) giving positions for each gauze section of the surface Hardy Plankton Recorder.

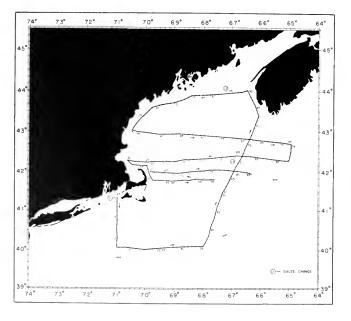


Figure 8,--Track of Albatross III cruise no. 58 (March 19 to April 1, 1955) giving positions for each gauze section of the 10-meter Hardy Plankton Recorder.

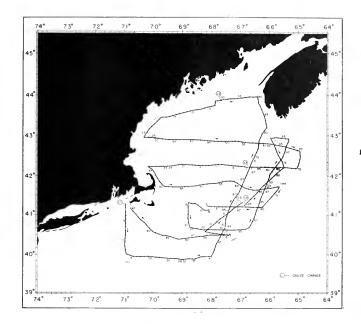


Figure 9.--Track of Albatross III cruise no. 60 (April 19 to May 2. 1955) giving positions for each gauze section of the surface Hardy Plankton Recorder.

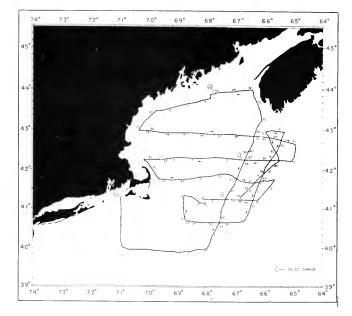


Figure 10, --Track of Albatross III cruise no. 60 (April 19 to May 2, 1955) giving positions for each gauze section of the 10-meter Hardy Plankton Recorder.

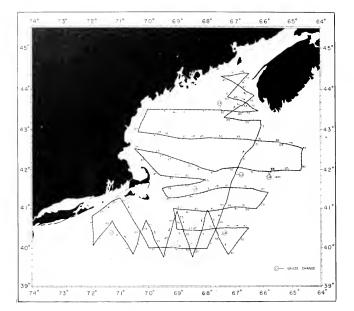


Figure 11.--Track of Albatross III cruise no. 61 (May 16 to May 28, 1955) giving positions for each gauze section of the surface Hardy Plankton Recorder.

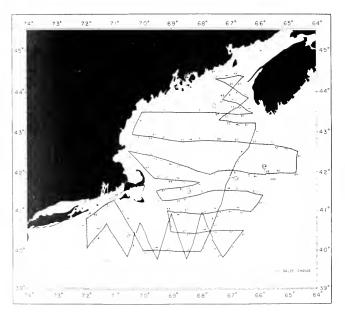


Figure 12.--Track of Albatross III cruise no. 61 (May 16 to May 28, 1955) giving positions for each gauze section of the 10-meter Hardy Plankton Recorder.

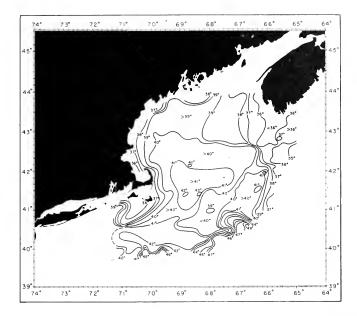


Figure 13.--Distribution of surface temperature, Albatrass III cruise no. 57, February 21 to March 2, 1955.

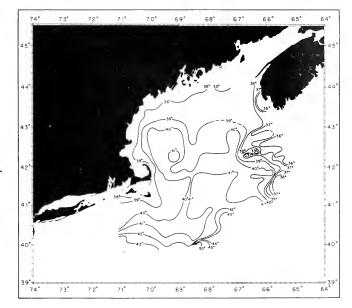


Figure 14,--Distribution of surface temperature, Albatross III cruise no. 58, March 19 to April 1, 1955.

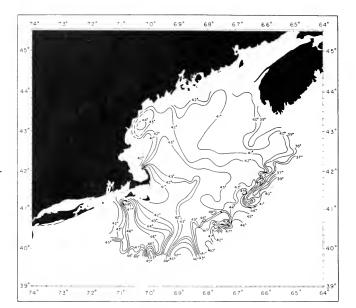


Figure 15.--Distribution of surface temperature, *Albatross III* cruise no. 60, April 19 to May 2, 1955.

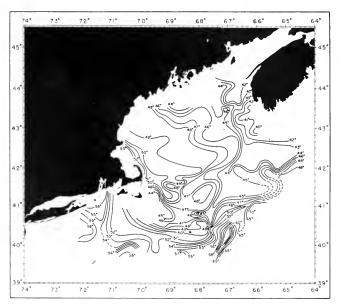


Figure 16,--Distribution of surface temperature, *Albatross III* cruise no. 61, May 16-28, 1955.

Table 1. --Species of fish eggs and larvae (with species code letters) caught during 1955, Albatross III cruise no. 57, February 21 - March 2; cruise no. 58, March 19 to April 1; cruise no. 60, April 19, to May 2; cruise no. 61. May 16 to May 28

Species code letters	Common name	Scientific name
A	American plaice	Hippoglossoides platessoides
AM	American sand lance	Ammodytes americanus
С	Atlantic cod	Gadus morhua
CN	Cunner	Tautogolabrus adspersus
CU	Cusk	Brosme brosme
E	American eel	Anguilla rostrata
G	Goosefish	Lophius americanus
Н	Haddock	Melanogrammus aeglefinus
НЕ	Atlantic herring	Clupea harengus harengus
LP	"Leptocephalus" stage	
М	Atlantic mackerel	Scomber scombrus
МН	Atlantic menhaden	Brevoortia tyrannus
P	Pollock	Pollachius virens
R	Re dfish	Sebastes marinus
RE	Rock gunnel	Pholis gunnellus
RH	Squirrel hake	Urophycis chuss
RO	Fourbeard rockling	Enchelyopus cimbrius
sc	Longhorn sculpin	Myoxocephalus octodecemspinosus
SH	Silver hake	Merluccious bilinearis
SY	Shanny	Stichaeidae (Family)
U	Unidentified	
W	Wrymouth	Cryptacanthodes maculatus
WE	Weakfish	Cynoscion regalis
WF	Witch flounder	Glyptocephalus cynoglossus
WH	White bake	Urophycis tenuis
WO	Atlantic wolffish	Anarhichas lupus
Y	Yellowtail flounder	Limanda ferruginea

Table 2.--Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 57, February 21 to March 2, 1955

							Sur	face	10-
		Lat-	Longi-	l-meter	Surface	10-meter			meter
Date	Time	itude	tude	tow	gauze	gauze	Salin-	Tem-	tem-
		N.	w.		section	section	ity	pera-	pera- ture
								ture	ture
					loading l	loading l	%∞	F.	°F.
Feb. 21	1500	41°17.51	71° 00'		2	2	32.30	36.0	35.0
Feb. 21	1600	41°06.81	71° 01'		3	3		39.5	39.3
Feb. 21	1700	41° 00'	71°01.2'		5	4	32.55	37.4	37.1
Feb. 21	1800	40° 531	71°01.91		6	5		37.6	37.5
Feb. 21	1900	40° 401	71° 00'		9	7	32.54	36.5	36.5
Feb. 21	2000	40°30.3'			10	8	00.10	41.0	39.9
Feb. 21	2100	40° 21'	71° 00'		12	10	33.12	42.3 41.7	41.9
Feb. 21	2200	40°07.51 39° 581	70° 59' 70° 58'		15 17	12 13	33.11	41.8	42.6
Feb. 21 Feb. 21	2300 2400	39° 581	70° 44'		19	14		41.3	41.4
Feb. 21	0100	39° 581	70°27.51		21	16	33.47	41.2	43.2
Feb. 22	0200	39°58.31	70° 15'		23	17		44.7	45.1
Feb. 22	0300	39°58.51	70° 05'		24	18	33.25	42.5	42.5
Feb. 22	0400	39°59.51	69°52.5'		25	19		42.4	42.4
Feb. 22	0500	40° 00'	69° 381	1	28	21	34.19	46.6	46.4
Feb. 22	0645	40° 00'	69° 32'		29	27	33.72	44.2	44.6
Feb. 22	0900	40° 001	69° 08'		32	29	33. 27	42.6	42.6
Feb. 22	1005	40° 00'	68° 57'		33	30		41.8	41.8
Feb. 22	1100	40° 01'	68°43.5'		35	32	33.04	41.9 44.5	42.0 44.6
Feb. 22	1200	40° 00'	68° 30'		37 40	33 35	33,77	45.2	48.2
Feb. 22	1300	40° 00' 40° 00'	68° 16'		40	37	33.11	46.8	47.8
Feb. 22 Feb. 22	1400 1500	40° 07'	67° 58'		44	38	33,59	44.5	45.0
Feb. 22	1600	40° 17'	67° 53'		46	40		46.5	46.5
Feb. 22	1700	40°25.2'		2	48	41	33.17	42.0	41.8
Feb. 22	1825	40°36.51			51	42		41.5	41.1
Feb. 22	2000	40° 51'	67° 38'		53	49	32.99	41.2	41.1
Feb. 22	2100	40°58.3'			55	51		41.3	41.2
Feb. 22	2200	41°08.51			56	52	33.03	40.7	40.5
Feb. 22	2300	41°19.5'			58	54	00.07	39.7	39.8
Feb. 22	2400	41°27.5'			60	56	33.27	39.7 40.0	40.0
Feb. 23	0100	41°35.5			61 63	57 58	33.16	39.8	39.8
Feb. 23 Feb. 23	0200	41°44.2'	66°51.5'	3	65	60	33.10	40.1	40.2
Feb. 23	0400	42 04	66°44.2'		67	61	33.17	39.7	39.5
Feb. 23	0500	42 06	66°42,5'	4	68	62		41.1	41.1
Feb. 23	0600	42*13.5			69	63	33.19	40.7	40.8
Feb. 23	0800	42° 26'	66*30.5		72	71	32.66	39.8	39.8
Feb. 23	0900	42° 36'	66°25.51	- -	74	73		40.0	39.9
Feb. 23	1000	42° 46'	66°22.5'		76	74	31.11	35.8	35.8
Feb. 23	1100	42° 55'	66°16.51		78	7.5		35.8	36.0
Feb. 23	1200	43° 04'	66°10.5'		80	77	31.31	36.4	36.2 35.9
Feb. 23	1310	43°13.5			82	78	21 26	35.9	36.0
Feb. 23	1400	43°19.5			83	79 81	31.26	35.9 35.6	35.7
Feb. 23	1500	43°27.21			85 86	82	31.21	35.5	35.5
Feb. 23 Feb. 23	1600 1700	43° 35' 43° 43'	66°12.3'	[]	88	83	31.21	35.9	36.0
Feb. 23	1800	43°52.5			90	84	31.59	35.6	35.6
Feb. 23	1900	43 52.5	66° 321		92	86		37.5	37.6
100. 20	1 1000	1000	1000	I	1	1	1	1	1

Table 2.--Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 57, February 21 to March 2, 1955--Continued

			, ,			10	Sur	face	10-
Date	Time	Lat- itude N.	Longi- tude W.	l-meter tow	Surface gauze section	10-meter gauze section	Salin- ity	Tem- pera- ture	meter tem- pera- ture
							%0	° _F .	°F
Feb. 23	2000	43°58.21	66° 421		93	87	31,80	38.1	38.2
Feb. 23	2100	43°56.5'	66°53.31		95	88		38.5	38.5
Feb. 23	2300	43° 53'	67°16.5'		98	90	31.92	38.1	38.2
					loading 2	loading 2			
Feb. 24	0130	43° 52'	67° 27'		1			38.4	38.4
Feb. 24	0400	43° 50'	67°48.51		3		32.34	39.6	39.6
Feb. 24	0615	43° 48'	68°14.5'		6			38.2	38.2
Feb. 24	0815	43°45.2'	68°44.5'		10		32.71	38.3	38.3
Feb. 24	0900	43°44.21	68°55.5'		11			38.8	38.8
Feb. 24	1000	43°42.5'	69° 081		12		32.79	39.5	39.6
Feb. 24	1100	43°40.5'			14			39.4	39.6
Feb. 24	1200	43°39.71	69°35.5'		15		32.32	37.6	37.9
Feb. 24 Feb. 24	1300 1400	43°35.3' 43°26.8'	69° 57'		17 18		32.56	36.3 38.9	37.5 38.9
Feb. 24	1500	43° 19'	70° 06'		20		32.30	38.8	38.5
Feb. 24	1600	43°10.3'			21		32.26	38.1	38.7
Feb. 24	1710	43°06.8	70° 20'	5	23		32.24	37.8	37.8
Feb. 24	1900	42°50.5'	70°30.2'		27		32.83	38.4	38.6
Feb. 24	2045	42°37.3'	70° 32'		29		32.45	37.8	38.0
Feb. 24	2200	42° 30'	70°31.51		30			38.0	38.1
Feb. 24	2300	42°21.3'	70°31.5'		31		32.50	36.9	37.1
Feb. 24	2400	42° 061	70°31.3'	- -	34			35.8	35.8
Feb. 25	0100	42°05.5'	70°23.8'	- -	35		32.56	36.9	37.3
Feb. 25	0200	42°12.2'	70° 13'		37	ļ -		38.7	38.8
Feb. 25	0305	42° 19'	70° 03'		38		33.12	39.8	39.8
Feb. 25	0405	42° 28¹	69° 59'		40			40.5	40.5
Feb. 25	0500	42°36.3'	69°57.5'	6	41		33.08	39.8	40.0
Feb. 25 Feb. 25	0600 0805	42°46.3' 43° 01'	69°56.5'		45		32.92	39.6 39.8	39.7 39.8
Feb. 25	0900	43°00.8'	69°47.8'		47 48		32.92	39.6	39.6
Feb. 25	1000	43°00.5	69°34.2'		50		32.64	39.5	39.3
Feb. 25	1100	42°58.7'	69°21.3'		52			40.3	40.1
Feb. 25	1200	42°54.3'	69°09.51		53	·	32.91	40.3	40.1
Feb. 25	1310	42° 541	68° 52'		56			39.6	39.7
Feb. 25	1400	42°51.71	68°38.51	i	58		32.64	39.7	39.8
Feb. 25	1500	42° 50'	68° 28'		59			39.9	39.9
Feb. 25	1610	42°47.8'	68° 14'		61		32,51	39.2	39.2
Feb. 25	1700	42°45.5'	68° 00'	~-	63			39.0	3,9.1
Feb. 25	1830	43°44.7'	67°47.5'		65		32.71	39.8	39.8
Feb. 25	2000	43° 45'	67°27.5'		67			39.1	39.5
Feb. 25	2105	42°44,2'	67°12.3'		69		32.20	38.5	38.5
Feb. 25	2200	42°43.3'	66°59.21		71	:	22 65	39.1	39.2
Feb. 25	2300	42° 43' 42° 42.3'	66°43.2'		73		32.65	39.5	39.7 36.8
Feb. 25 Feb. 26	2400 0100	42°42.3'	66°32.5'		75 76		31.27	36.1 35.6	36.2
Feb. 26	0200	42°42.4'	66°04.5'		78		31.21	35.7	36.5
Feb. 26	0230	42° 431	65°59.51	7	79		31.15	36.0	36.7
Feb. 26	0400	42°42.8'	65° 431		81			35.7	35.8
Feb. 26	0500	42°42, 4'		l	82		31.09	35.7	36.1
100. 20	, 0000	1 34 34 3	100 01.0		1 04	1	31.03	55.1	30.1

Table 2. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 57, February 21 to March 2, 1955--Continued

		Lat-	Longi-	l-meter	Surface	10-meter	Sur	face	10- meter
Date	Time	itude N.	tude W.	tow	gauze section	gauze section	Salin- ity	Tem- pera- ture	tem- pera- ture
							%	°F.	°F.
Feb. 26	0600	42° 42'	65° 20'		84	- -		36.0	36.0
Feb. 26	07 00	42°41.51	65° 10'		85		30,94	35.7	35.7
Feb. 26	0755	42°37.81			88			34.7	34.8
Feb. 26	0900	42°30.51	65° 18'		90		31.16	34.9	34.9
Feb. 26	1000	42° 231	65°26.51		91		31.13	35.3	35.4
Feb. 26	1100	42*15.71	65°35.5'		93			35.5	35.6
Feb. 26	1150	42°09.2'			95		31.44	36.9	37.1
Feb. 26	1235	42°04.21	65° 49'		97	100 din = 2		36.7	37.4
Feb. 26	1420	41°57.5'	65°50.51	8	loading 3	loading 3	32.01	37.9	38.3
Feb. 26	1600	41°57.5	66°07.71		3	2		39.8	41.1
Feb. 26	1700	41°57.5'	66°18.5'		5	3	33.12	40.5	40.5
Feb. 26	1800	41°57.51	66°32.21		6	4		40.2	40.2
Feb. 26	1900	41°57.51	66° 45'		8	5	33.27	40.9	41.0
Feb. 26	2000	41° 59'	66° 581		10	6		40.4	40.4
Feb. 26	2100	42° 01'	67°11.8'		12	8	33.31	40.9	41.0
Feb. 26	2200	42° 021	67°27.81		13	9		41.4	41.6
Feb. 26 Feb. 27	2305 0005	42°03.5' 42° 05'	67°46.41 68° 001		16	11	33.39	41.4	41.4
Feb. 27	0100	42°06.51	68°13.81		18 20	13	33.10	40.8	40.8
Feb. 27	0200	42° 081	68°27.5'		21	14		40.7	40.6
Feb. 27	0300	42°09.51	68°40.51		23	15	33.92	40.0	40.0
Feb. 27	0400	42°11.8'	68°54.21		25	16		41.0	41.0
Feb. 27	0500	42°12.7'	69° 08'		26	18	33.37	41.4	41.4
Feb. 27	0605	42° 14'	69° 22'	9	32	21		40.7	40.7
Feb. 27	0800	42° 14'	69°38.51		34	22	33.21	40.4	40.5
Feb. 27	1005	42° 13'	69° 55'		37	23	32.97	39.3	39.3
Feb. 27	1100	42° 03¹	69°54.51		39	24		37.8	38.0
Feb. 27 Feb. 27	1200 1300	41° 53' 41°43.3'	69°53.81 69° 501		40 42	25 26	32.76	38.7 39.2	38.7
Feb. 27	1400	41°35.5°	69°43.5'		43	27	32.89	39.5	39.6
Feb. 27	1500	41°30.5'	69°35.51		45	28	J2.03	40.1	40.0
Feb. 27	1600	41° 30'	69°21.3'		47	30	32, 96	39.4	39.5
Feb. 27	1705	41°27.5	69°05.51		49	31		41.2	41.2
Feb. 27	1810	41° 26'	68° 51'	10	51	32	33. 29	41.8	41.7
Feb. 27	2000	41°26.7'	68° 37'		53	35	33.25	41.7	41.7
Feb. 27	2100	41°27.2'	68° 21'		55	37		41.8	41.8
Feb. 27	2200	41°27.8'	68°09.7'		57	38	33.21	39.5	
Feb. 27	2300	41° 28'	68° 00'		58	39		39.4	
Feb. 27 Feb. 28	2400 0100	41°28.3' 41°28.5'	67° 52¹ 67°44.5¹		59 60	39 40	33, 21	39.9 40.4	39.9
Feb. 28	0210	41°28.8	67°32.5'		62	41	33.28	40.4	
Feb. 28	0300	41°29.5'	67° 20'		63	42	33.40	40.3	40.1
Feb. 28	0400	41°29.7'	67° 06'		65	43	33.19	40.3	
Feb. 28	0500	41° 30'	66°45.51		68	45		40.5	40.6
Feb. 28	0640	41°29.51	66°23.5'	11	71	46	33.00	40.8	41.0
Feb. 28	0805	41° 28'	66°02.31		74	49	32.13	38.2	38.5
Feb. 28	0900	41° 26'	65°54.21		77	50	31. 8 2	37.5	37.4
Feb. 28	1000	41°18.3°			78	52	32,03	37.1 38.2	
Feb. 28	1100	41° 121	66°09.21		80	53	32.03	38.2	

Table 2.--Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 57, February 21 to March 2, 1955--Continued

		T - 4			Sf	10	Suri	face	10-
Date	Time	Lat- itude	Longi-	l-meter	Surface gauze	10-meter gauze		Tem-	meter tem-
Date	111116	N.	W.	tow	section	section	Salin-	pera-	pera-
	ĺ				4		ity	ture	ture
							°/∞	$^{\circ}F$.	\circ_F .
Feb. 28	1200	41° 06'	66° 19'		81	54	32.31	39.1	39.3
Feb. 28	1300	41° 01'	66°28.2'		82	55		38.8	39.1
Feb. 28	1400	41° 01'	66°41.8'		84	57	32,56	40.1	40.1
Feb. 28	1500	41° 01'	66° 541		86	58		39.9	40.0
Feb. 28	1600	41° 01'	67° 06'		87	59	32.83	40.8	40.8
Feb. 28	1700	41° 01'	67°18.5'		89	60		40.4	40.3
					loading 4				
Feb. 28	1755	41° 01'	67°26.6'	12	1	61	32.97	41.0	41.0
Feb. 28	2000	41° 00' 41° 00'	67°40.5'		3	63	33.07	40.2	40.0
Feb. 28 Feb. 28	2105 2200	41° 00'	67°55.3'		4 6	64 65	33.17	39.0 39.2	39.0 39.0
Feb. 28	2300	41° 00'	68° 14'	1	7	66	33.11	39.5	39.6
Feb. 28	2400	41° 00'	68° 32'		9	67	33. 21	40.4	40.3
Mar. 1	0100	41° CO'	68° 46'		11	69		40.9	41.0
Mar. 1	0200	41° 00'	69°01.51		13	70	33.17	40.5	40.6
Mar. 1	0305	40°55.71	69° 11'		15	72		40.5	40.8
Mar. 1	0405	40° 491	69° 081	~ -	16	72	33.25	41.5	41.5
Mar. 1	0505	40° 39'	69°03.51		18	74		40.0	40.1
Mar. 1	0610	40° 31'	69° 001	13	20	75	33.09	41.0	41.0
Mar. 1	0800	40°29.8'	68°43.51		21	76		41.2	41.1
Mar. 1	0900	40°29.5'	68° 31'		23	77	32.55	40.8	41.6
Mar. 1	1000	40°28.2'	68° 18'		24	78		39.6	39.8
Mar. 1 Mar. 1	$1100 \\ 1200$	40°28.5¹ 40°29.7¹	68°04.8' 67°48.5'		26	80	32.01	39.4	39.4
Mar. 1	1300	40°29.8'			29 30	81 82	32.12	39.4 41.9	39.4 42.0
Mar. 1	1405	40° 30'	67°25.81		31	83	32.12	39.5	39.6
Mar. 1	1500	40° 31'	67° 16'		32	84	32.48	40.9	40.8
Mar. 1	1600	40° 32'	67°05.51		34	85		47.1	47.2
Mar. 1	1700	40° 331	66°51.81		35	86	34.03	46.4	46.3
Mar. 1	1805	40°41.8'	66° 461		37	87		49.0	48.7
						loading 4			
Mar. 1	2005	40°54.51			41	2	32.44	40.4	40.5
Mar. 1	2105	41° 04'	66° 34'		42	3		40.3	40.4
Mar. 1	2200	41°13.8'			44	4	33.02	40.7	40.8
Mar. 1 Mar. 1	2305 2400	41°22.5' 41° 28'	66°23.51		46 47	5 6	22 02	40.6 40.6	40.7
Mar. 2	0100	41° 38'	66° 16'		49	7	33.03	40.8	40.7
Mar. 2	0200	41°47.5'			50	8	33.06	40.3	40.3
Mar. 2	0300	41°57.5'	66° 06'		52	9		41.1	41.1
Mar. 2	0405	42°06.81			54	11	32.21	38.8	38.9
Mar. 2	0505	42°16.2'	65°55.31		56	12		35.8	35.9
Mar. 2	0605	42° 261	65° 50'		57	13	31.30	35.8	35.9
Mar. 2	0715	42°37.5'			59	14		35.7	35.7
Mar. 2	0800	42°42.5'	65°41.5')	60	15	31.15	36.7	36.9
Mar. 2	0905	42°50.8'	65°36.21		62	16		36.8	37.1
Mar. 2	1005	43° 01'	65° 31'		64	17	31.07	36.6	36.5
Mar. 2 Mar. 2	$\frac{1100}{1200}$	43°10.8' 43° 21'	65°25.8' 65° 23'		66 68	19 20	31.00	35.5 35.9	35.6
wiai. 2	1200	120 21	00 40'	1	00	20	31.00	30.9	35.9
						1	L	L	

Table 3. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 58, March 19 to April 1, 1955

Date Time Latitude N. Longitude N. Longitud	10- meter
Mar. 19 1100 41° 101 71° 001 2 2 2 33.56 39.5 Mar. 19 1300 40°48.5 70°59.5 6 5 39.7 Mar. 19 1400 40° 40' 70°59.5 6 5 39.7 Mar. 19 1500 40°28.8 71°00.8 9 8 39.4 Mar. 19 1600 40° 17' 70° 59 11 10 33.11 41.6 Mar. 19 1700 40°07.5 71° 00 12 11 43.7 Mar. 19 1800 40° 01' 70°52.2 14 13 33.24 43.1 Mar. 19 1905 40°01.5 70°22.5 18 16 33.17 43.0 Mar. 19 2000 40°00.5 70°22.5 18 16 33.17 43.0 Mar. 19 2105 39°58.2 70°02 20 18 42.9 Mar. 19 2300 40°00 69°39.3 22 20 33.13 42.4 Mar. 19 2400 40° 01' 69°28.2 1 24 22 33.19 41.7 Mar. 20 0200 40°01.7 69°12.5 28 26 33.12 42.0 Mar. 20 0300 40°02.2 68° 58 31 28 42.0 Mar. 20 0400 40°02.8 68° 43 33 33 34.96 41.5 Mar. 20 0600 40°03.7 68° 10' 34 32 33.48 43.7 Mar. 20 0705 40°03.7 68° 10' 34 32 33.48 43.7 Mar. 20 0805 40°03.7 68° 10' 34 32 33.28 43.9 Mar. 20 1100 40° 12' 67°52.5 40 37 43.0 Mar. 20 1300 40°03.7 68° 10' 37 34 33.95 43.9 Mar. 20 1300 40°3.7 67° 41.8 42 42 38 32.90 42.1 Mar. 20 1300 40°3.7 67° 41.8 42 42 38 32.90 42.1 Mar. 20 1300 40°5.8 67° 34.5 35 34 33.31 41.0 Mar. 20 1500 40°55.8 67° 34.5 47 43 43.0 Mar. 20 1500 40°55.8 67° 34.5 47 44 40 42.2 Mar. 20 1600 41°25.7 67°51.7 49 44 33.19 42.2 Mar. 20 1600 41°25.8 67°34.5 45 46 41.7 Mar. 20 2005 42°00 66°57.2 59 62 33.13 40.7 Mar. 20 2205 42°00 66°57.2 59 62 33.13 40.7 Mar. 20 2400 42°8.8 66°43.9 50 66 66 70 31.71 36.9	tem- pera- ture
Mar. 19 1100 41° 101 71° 001 2 2 2 33.56 39.5 Mar. 19 1300 40°48.5 70°59.5 6 5 39.7 Mar. 19 1400 40° 40' 70°59.5 6 5 39.7 Mar. 19 1500 40°28.8 71°00.8 9 8 39.4 Mar. 19 1600 40° 17' 70° 59 11 10 33.11 41.6 Mar. 19 1700 40°07.5 71° 00 12 11 43.7 Mar. 19 1800 40° 01' 70°52.2 14 13 33.24 43.1 Mar. 19 1905 40°01.5 70°22.5 18 16 33.17 43.0 Mar. 19 2000 40°00.5 70°22.5 18 16 33.17 43.0 Mar. 19 2105 39°58.2 70°02 20 18 42.9 Mar. 19 2300 40°00 69°39.3 22 20 33.13 42.4 Mar. 19 2400 40° 01' 69°28.2 1 24 22 33.19 41.7 Mar. 20 0200 40°01.7 69°12.5 28 26 33.12 42.0 Mar. 20 0300 40°02.2 68° 58 31 28 42.0 Mar. 20 0400 40°02.8 68° 43 33 33 34.96 41.5 Mar. 20 0600 40°03.7 68° 10' 34 32 33.48 43.7 Mar. 20 0705 40°03.7 68° 10' 34 32 33.48 43.7 Mar. 20 0805 40°03.7 68° 10' 34 32 33.28 43.9 Mar. 20 1100 40° 12' 67°52.5 40 37 43.0 Mar. 20 1300 40°03.7 68° 10' 37 34 33.95 43.9 Mar. 20 1300 40°3.7 67° 41.8 42 42 38 32.90 42.1 Mar. 20 1300 40°3.7 67° 41.8 42 42 38 32.90 42.1 Mar. 20 1300 40°5.8 67° 34.5 35 34 33.31 41.0 Mar. 20 1500 40°55.8 67° 34.5 47 43 43.0 Mar. 20 1500 40°55.8 67° 34.5 47 44 40 42.2 Mar. 20 1600 41°25.7 67°51.7 49 44 33.19 42.2 Mar. 20 1600 41°25.8 67°34.5 45 46 41.7 Mar. 20 2005 42°00 66°57.2 59 62 33.13 40.7 Mar. 20 2205 42°00 66°57.2 59 62 33.13 40.7 Mar. 20 2400 42°8.8 66°43.9 50 66 66 70 31.71 36.9	°F.
Mar. 19 1100 41° 101 71° 001 2 2 2 33.56 39.5 Mar. 19 1300 40°48.5 70°59.5 6 5 39.7 Mar. 19 1400 40° 40' 70°59.5 6 5 39.7 Mar. 19 1500 40°28.8 71°00.8 9 8 39.4 Mar. 19 1600 40° 17' 70° 59 11 10 33.11 41.6 Mar. 19 1700 40°07.5 71° 00 12 11 43.7 Mar. 19 1800 40° 01' 70°52.2 14 13 33.24 43.1 Mar. 19 1905 40°01.5 70°22.5 18 16 33.17 43.0 Mar. 19 2000 40°00.5 70°22.5 18 16 33.17 43.0 Mar. 19 2105 39°58.2 70°02 20 18 42.9 Mar. 19 2300 40°00 69°39.3 22 20 33.13 42.4 Mar. 19 2400 40° 01' 69°28.2 1 24 22 33.19 41.7 Mar. 20 0200 40°01.7 69°12.5 28 26 33.12 42.0 Mar. 20 0300 40°02.2 68° 58 31 28 42.0 Mar. 20 0400 40°02.8 68° 43 33 33 34.96 41.5 Mar. 20 0600 40°03.7 68° 10' 34 32 33.48 43.7 Mar. 20 0705 40°03.7 68° 10' 34 32 33.48 43.7 Mar. 20 0805 40°03.7 68° 10' 34 32 33.28 43.9 Mar. 20 1100 40° 12' 67°52.5 40 37 43.0 Mar. 20 1300 40°03.7 68° 10' 37 34 33.95 43.9 Mar. 20 1300 40°3.7 67° 41.8 42 42 38 32.90 42.1 Mar. 20 1300 40°3.7 67° 41.8 42 42 38 32.90 42.1 Mar. 20 1300 40°5.8 67° 34.5 35 34 33.31 41.0 Mar. 20 1500 40°55.8 67° 34.5 47 43 43.0 Mar. 20 1500 40°55.8 67° 34.5 47 44 40 42.2 Mar. 20 1600 41°25.7 67°51.7 49 44 33.19 42.2 Mar. 20 1600 41°25.8 67°34.5 45 46 41.7 Mar. 20 2005 42°00 66°57.2 59 62 33.13 40.7 Mar. 20 2205 42°00 66°57.2 59 62 33.13 40.7 Mar. 20 2400 42°8.8 66°43.9 50 66 66 70 31.71 36.9	37.7
Mar. 19 1300	38.1
Mar. 19	39.4
Mar. 19	39.7
Mar. 19	39.8
Mar. 19 1700	39.4
Mar. 19	41.5
Mar. 19 1905 40°01.5! 70°40.5! 15 14 16 33.17 43.0 Mar. 19 2105 39°58.2! 70°02! 20 18 43.2 Mar. 19 2210 39°58.2! 70°02! 20 18 43.2 Mar. 19 2210 39°59.5! 69°49.5! 22 20 33.13 42.4 Mar. 19 2300 40°00! 69°39.3! 23 21 42.0 Mar. 19 2400 40°01! 69°28.2! 1 24 22 33.19 41.7 Mar. 20 0200 40°01.7! 69°12.5! 28 26 33.12 42.0 Mar. 20 0300 40°02.2! 68°58! 31 28 42.0 Mar. 20 0400 40°02.8! 68° 43! 33 30 34.96 41.5 Mar. 20 0510 40°02.9! 68°35.5! 34 31 41.1 Mar. 20 0600 40°03.1! 68° 30! 34 32 33.48 43.7 Mar. 20 0705 40°03.7! 68° 10! 37 34 32 33.48 43.7 Mar. 20 0805 40°03.7! 68° 10! 37 34 33.95 45.9 Mar. 20 1000 40°12! 67°58.5! 40 37 43.4 Mar. 20 1000 40°12! 67°58.5! 42 38 32.90 42.1 Mar. 20 1200 40°30.4! 67°44.5! 44 40 42.2 Mar. 20 1300 40°39! 67°41.8! 44 40 42.2 Mar. 20 1300 40°39! 67°41.8! 44 40 42.2 Mar. 20 1600 40°55.8! 67°36.8! 49 44 33.19 42.2 Mar. 20 1700 41°15.8! 67°25.9! 53 48 33.31 41.0 Mar. 20 2005 42°08.3! 66°57.2! 59 62 33.13 40.7 Mar. 20 2005 42°08.3! 66°57.2! 59 62 33.13 40.7 Mar. 20 2005 42°08.3! 66°57.2! 64 68 41.1 Mar. 20 2005 42°08.3! 66°51.2! 66 66 70 31.71 36.9	43. 2
Mar. 19 2000 40°00.5! 70°22.5! 18 16 33.17 43.0 Mar. 19 2105 39°58.2! 70°02! 20 18 43.2 Mar. 19 2210 39°59.5! 69°49.5! 22 20 33.13 42.4 Mar. 19 2300 40°00! 69°39.3! 23 21 42.0 Mar. 19 2400 40°01! 69°28.2! 1 24 22 33.19 41.7 Mar. 20 0200 40°01.7! 69°12.5! 28 26 33.12 42.0 Mar. 20 0300 40°02.2! 68°58! 31 28 42.0 Mar. 20 0400 40°02.8! 68°43! 33 30 34.96 41.5 Mar. 20 0510 40°02.9! 68°35.5! 34 31 41.1 Mar. 20 0510 40°02.9! 68°35.5! 34 32 33.48 43.7 Mar. 20 0705 40°03.3! 68°23! 35 33 51.3 Mar. 20 0805 40°03.7! 68°10! 37 34 33.95 45.9 Mar. 20 0905 40°03.7! 68°10! 37 34 33.25 43.3 Mar. 20 1000 40°31.1! 67°52.5! 40 37 43.4 Mar. 20 1000 40°31.1! 67°47! 42 38 32.90 42.1 Mar. 20 1200 40°30.4! 67°44.5! 44 40 42.2 Mar. 20 1300 40°30.4! 67°44.5! 44 40 42.2 Mar. 20 1400 40°46.2! 67°36.8! 47 43 43.0 Mar. 20 1600 41°05.7! 67°31! 53 48 33.31 41.0 Mar. 20 1000 41°05.7! 67°31! 59 62 33.28 41.1 Mar. 20 2005 41°39.6! 67°03.8! 59 62 33.28 41.1 Mar. 20 2005 41°39.6! 67°03.8! 59 62 33.28 41.1 Mar. 20 2005 41°39.6! 67°03.8! 59 62 33.28 41.1 Mar. 20 2005 41°39.6! 67°03.8! 61 65 63 67 33.13 40.7 Mar. 20 2400 42°8.3! 66°51.2! 64 68 33.0 Mar. 20 2400 42°8.3! 66°51.2! 64 68 33.0 Mar. 20 2400 42°8.3! 66°61.2! 66 66 70 31.71 36.9	42.8
Mar. 19 2105 39*58.2! 70° 02! 20 18 43.2 Mar. 19 2210 39*59.5! 69*49.5! 22 20 33.13 42.4 Mar. 19 2400 40° 00! 69*39.3! 23 21 42.0 Mar. 20 0200 40°01.7! 69°28.2! 1 24 22 33.19 41.7 Mar. 20 0300 40°02.8! 68° 81 28 26 33.12 42.0 Mar. 20 0400 40°02.8! 68° 43' 31 28 42.0 Mar. 20 0510 40°02.8! 68° 43' 31 28 42.0 Mar. 20 0510 40°03.3! 68° 35.5! 34 31 41.1 Mar. 20 0705 40°03.3! 68° 23!	43.1
Mar. 19 2210 39°59,5' 69°49,5' 22 20 33.13 42.4 Mar. 19 2400 40° 00! 69°28,2! 1 24 22 33.19 41.7 Mar. 20 0200 40°01.7' 69°12.5' 28 26 33.12 42.0 Mar. 20 0300 40°02.8' 68° 58! 31 28 42.0 Mar. 20 0400 40°02.8' 68° 43! 33 30 34.96 41.5 Mar. 20 0510 40°02.8' 68° 35.5' 34 31 41.1 Mar. 20 0600 40°03.1' 68° 30! 34 32 33.48 43.7 Mar. 20 0705 40°03.3' 68° 30! 35 33 51.3 Mar. 20 0805 40°03.7' 68° 10! 37 34 33.95 45.9 Mar. 20 0805 40°04.2! 67°58.5! 39 35 33.25 43.3 Mar. 20 1000 40°12! 67°52.5! 40 37 43.4 Mar. 20 1100 40°21.3' 67°41.5! 42 38 32.90 42.1 Mar. 20 1300 40°39! 67°41.8! 44 40 42.2 Mar. 20 1300 40°39! 67°41.8! 47 43 43.0 Mar. 20 1600 41°05.7! 67°31! 49 44 33.19 42.2 Mar. 20 1800 41°05.7! 67°31! 51 46 41.7 Mar. 20 1800 41°05.7! 67°31! 59 62 33.28 41.1 Mar. 20 2005 41°39.6! 67°10.2! 59 62 33.28 41.1 Mar. 20 2005 41°49! 67°03.8! 61 65 41.1 Mar. 20 2005 42°08.3' 66°51.2! 64 68 39.0 Mar. 20 2400 42°18! 66°43.9! 66 70 31.71 36.9	43.2
Mar. 19 2400 40° 01' 69°28.2' 1 24 22 33.19 41.7 Mar. 20 0200 40°01.7' 69°12.5' 28 26 33.12 42.0 Mar. 20 0300 40°02.2' 68° 58' 31 28 42.0 Mar. 20 0400 40°02.8' 68° 43' 33 30 34.96 41.5 Mar. 20 0510 40°02.9' 68°35.5' 34 31 41.1 Mar. 20 0500 40°03.1' 68° 30' 34 32 33.48 43.7 Mar. 20 0705 40°03.3' 68° 23' 35 33 51.3 Mar. 20 0805 40°03.7' 68° 10' 37 34 33.95 45.9 Mar. 20 0905 40°03.7' 68° 10' 37 34 33.95 45.9 Mar. 20 1000 40° 12' 67°58.5' 40 37 43.4 Mar. 20 1100 40° 12' 67°52.5' 40 37 43.4 Mar. 20 1100 40° 31' 67° 47' 42 38 32.9 42.1 Mar. 20 1200 40°30.4' 67°44.5' 44 40 42.2 Mar. 20 1300 40°30.4' 67°44.5' 44 40 42.2 Mar. 20 1400 40°46.2' 67°36.8' 47 43 32.95 42.7 Mar. 20 1500 40°46.2' 67°34.5' 49 44 33.19 42.2 Mar. 20 1600 41°05.7' 67°31' 51 46 41.7 Mar. 20 1700 41°15.8' 67°25.9' 53 48 33.31 41.0 Mar. 20 2005 41°39.6' 67°10.2' 59 62 33.28 41.1 Mar. 20 2100 41°49! 67°03.8' 61 65 41.1 Mar. 20 2205 42°00' 66°51.2' 66 70 31.71 36.9 Mar. 20 2400 42° 18' 66°43.9' 66 70 31.71 36.9	42.7
Mar. 20	42.3
Mar. 20 0300 40°02.2' 68° 58' 31 28 34.96 41.5 Mar. 20 0400 40°02.8' 68° 43' 34 31 Mar. 20 0600 40°03.1' 68° 35.5' 34 31 32 33.48 43.7 Mar. 20 0705 40°03.1' 68° 30' 34 32 33.48 43.7 Mar. 20 0805 40°03.7' 68° 10' 37 34 33.95 45.9 Mar. 20 0905 40°04.2' 67°58.5' 39 35 33.25 43.3 Mar. 20 1000 40° 12' 67°52.5' 40 37 43.4 Mar. 20 1100 40°21.3' 67° 41' 42 38 32.90 42.1 Mar. 20 1300 40° 39' 67°41.8' 44 40 42.2 Mar. 20 1300 40° 39' 67°41.8' 45 41 32.95 42.7 Mar. 20 1500 40°55.8' 67°36.8' 49 44 33.19 42.2 Mar. 20 1700 41°15.8' 67°25.9' 53 48 33.31 41.0 Mar. 20 1800 41°26.2' 67°03.8' 59 62 33.28 41.1 Mar. 20 2100 41°49' 67°03.8' 59 62 33.28 41.1 Mar. 20 2205 42°00' 66°57.2' 66 67 031.71 36.9 Mar. 20 2400 42°18' 66°43.9' 66 70 31.71 36.9	41.8
Mar. 20	42.0
Mar. 20	42.0
Mar. 20	41.5
Mar. 20 0705	41.1
Mar. 20 0805 40°03.7' 68° 10' 37 34 33.95 45.9 Mar. 20 0905 40°04.2' 67°58.5' 39 35 33.25 43.3 Mar. 20 1000 40°12' 67°52.5' 40 37 43.4 Mar. 20 1100 40°21.3' 67°47' 42 38 32.90 42.1 Mar. 20 1200 40°30.4' 67°44.5' 44 40 42.2 Mar. 20 1300 40°39' 67°41.8' 47 43 43.0 Mar. 20 1400 40°46.2' 67°36.8' 47 43 43.0 Mar. 20 1500 40°55.8' 67°34.5' 49 44 33.19 42.2 Mar. 20 1600 41°55.8' 67°25.9' <td>43.7</td>	43.7
Mar. 20 0905	51.4 48.0
Mar. 20	43.4
Mar. 20 1100 40°21.3' 67°47' 42 38 32.90 42.1 Mar. 20 1200 40°30.4' 67°44.5' 44 40 42.2 Mar. 20 1300 40°30.4' 67°41.8' 45 41 32.95 42.7 Mar. 20 1400 40°45.8' 67°36.8' 47 43 43.0 Mar. 20 1500 40°55.8' 67°34.5' 49 44 33.19 42.2 Mar. 20 1600 41°05.7' 67°31' 51 46 41.7 Mar. 20 1700 41°15.8' 67°25.9' 53 48 33.31 41.0 Mar. 20 1800 41°26.2' 67°21' 2 55 50 41.1 Mar. 20 2005 41°39.6' 67°10.2' 59 62 33.28 41.1 Mar. 20 2100 41°49! 67°03.8' 61 65 41.1 Mar. 20 2205 42°00' 66°57.2' 63 67 33.13 40.7 Mar. 20 2300 42°08.3' 66°51.2' 64 68 39.0 Mar. 20 2400 42°18' 66°43.9' 66 70 31.71 36.9	43.5
Mar. 20 1200 40°30.4' 67°44.5' 44 40 32.95 42.7 Mar. 20 1300 40°30.4' 67°41.8' 45 41 32.95 42.7 Mar. 20 1400 40°46.2' 67°36.8' 47 43 43.0 Mar. 20 1500 40°55.8' 67°34.5' 49 44 33.19 42.2 Mar. 20 1600 41°05.7' 67°31' 51 46 41.7 Mar. 20 1700 41°15.8' 67°25.9' 53 48 33.31 41.0 Mar. 20 1800 41°26.2' 67° 21' 2 55 50 41.1 Mar. 20 2005 41°39.6' 67°10.2' 59 62 33.28 41.1 Mar. 20 2100 41°49' 67°03.8' 61 65 41.1 Mar. 20 2205 42°00' 66°57.2' 63 67 33.13 40.7 Mar. 20 2300 42°08.3' 66°51.2' 64 68 39.0 Mar. 20 2400 42°18' 66°43.9' 66 70 31.71 36.9	42.2
Mar. 20	41.6
Mar. 20	42.5
Mar. 20	41,2
Mar. 20 1700 41°15.8' 67°25.9' 53 48 33.31 41.0 Mar. 20 1800 41°26.2' 67°21' 2 55 50 41.1 Mar. 20 2005 41°39.6' 67°10.2' 59 62 33.28 41.1 Mar. 20 2100 41°49' 67°03.8' 61 65 41.1 Mar. 20 2205 42°00' 66°57.2' 63 67 33.13 40.7 Mar. 20 2300 42°08.3' 66°51.2' 64 68 39.0 Mar. 20 2400 42°18' 66°43.9' 66 70 31.71 36.9	41.0
Mar. 20 1800 41°26.2' 67°21' 2 55 50 41.1 41°39.6' 67°10.2' 59 62 33.28 41.1 41°49' 67°03.8' 61 65 41.1 41°49' 66°57.2' 63 67 33.13 40.7 41°49' 42°00' 66°57.2' 64 68 39.0 42°00' 42°08' 66°51.2' 64 68 39.0 42°18' 66°43.9' 66 70 31.71 36.9	41.0
Mar. 20 2005 41°39.6' 67°10.2' 59 62 33.28 41.1 Mar. 20 2100 41°49' 67°03.8' 61 65 41.1 Mar. 20 2205 42°00' 66°57.2' 63 67 33.13 40.7 Mar. 20 2300 42°08.3' 66°51.2' 64 68 39.0 Mar. 20 2400 42°18' 66°43.9' 66 70 31.71 36.9	41.0
Mar. 20 2100 41° 49' 67°03.8' 61 65 41.1 Mar. 20 2205 42° 00' 66°57.2' 63 67 33.13 40.7 Mar. 20 2300 42°08.3' 66°51.2' 64 68 39.0 Mar. 20 2400 42° 18' 66°43.9' 66 70 31.71 36.9	41.2
Mar. 20 2205 42° 00! 66°57.2! 63 67 33.13 40.7 42° 08.3! 66°51.2! 64 68 39.0 42° 18! 66°43.9! 66 70 31.71 36.9	41.2
Mar. 20 2300 42°08.3' 66°51.2' 64 68 39.0 Mar. 20 2400 42° 18' 66°43.9' 66 70 31.71 36.9	40.7
Mar. 20 2400 42° 18' 66°43.9' 66 70 31.71 36.9	39.2
	36.9
Mar. 21 0100 42°37.5' 66°37.3' 68 72 33.32 38.0	38.0
Mar. 21 0200 42°33.6' 66°34' 69 74 37.1	36.9
Mar. 21 0300 42°43.5' 66°27.8' 71 75 31.80 37.6	37.5
Mar. 21 0405 42°51.8' 66°22.7' 73 77 36.5	36.7
Mar. 21 0500 43° 00' 66°17.8' 74 78 32.17 38.4	39.6
Mar. 21 0600 43°08.7' 66°13.2' 3 76 80 38.0	38.1
Mar. 21 0800 43° 20' 66°06.8' ~~ 78 82 31.65 37.3	37.6
Mar. 21 0900 43° 25' 66° 08' 79 83 35.4	35.7
Mar. 21 1000 43° 30' 66°10'.2' 80 84 31.77 35.4	35.6
Mar. 21 1100 43°36.5' 66° 14' 82 85 35.6 31.55 35.6	35.7 35.6
Mar. 21 1200 43°45.0° 66°19.1° 84 87 31.33 35.6 37	37.5
Mar. 21 1400 43°58.7 66° 30' 87 90 32.20 38.1	38.0

Table 3.--Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 58, March 19 to April 1, 1955--Continued

							Surf	ace	10-
Dodo	T:	Lat-	Longi-	1-meter	Surface	10-meter		Т	meter
Date	Time	itude N.	tude W.	tow	gauze section	gauze section	Salin-	Tem-	tem-
		14.	٧٧.		section	section	ity	pera- ture	pera- ture
								tare	ture
							%	∘ _F .	°F.
Mar. 21	1500	43°56.71	66°41.31	- -	89	92		38.4	38.4
Mar. 21	1600	43° 561	66°54.7'		91	94	32.15	38.4	38.4
					loading 2	loading 2			
Mar. 21	1700	43°55.4'	67° 09'	4	1	1	32.39	38.5	38.5
Mar. 21	1900	43°54.4'	67°15.8'		2	1		38.3	38.4
Mar. 21	2000	43°53.7'	67°29.51		3	3	31.97	38.1	38.3
Mar. 21 Mar. 21	2100 2200	43°52.8' 43° 52'	67°42.2' 68°03.5'		5 7	5 8	20 20	37.9	38.0
Mar. 21 Mar. 21	2300	43°51.5'	68°14.7'		9	9	32.30	38.6 38.2	38.6 38.3
Mar. 21	2400	43°50.3'	68° 27'		10	11	32.21	38.2	38.5
Mar. 22	0100	43°44.5'	68°43.81		13	13	52.21	38.2	38.2
Mar. 22	0200	43*42.41	68°52.51		14	14	32, 32	37.4	37.5
Mar. 22	0300	43°39.8'	69°06,81		16	16		37.6	37.6
Mar. 22	0400	43°38.41	69° 22'		18	18	32, 48	38.1	38.1
Mar. 22	0500	43° 361	69° 361		19	20		38.1	38.4
Mar. 22	0600	43°33.7'	69° 491		21	22	31.78	37.6	38.2
Mar. 22	0700	43°26.21	69°59.51		23	24		37.8	37.9
Mar. 22	0800	43° 21'	70°06.51		24	25	32.56	38.7	38.8
Mar. 22	0900	43°14.3'	70°15.81		26	27		38.1	38.2
Mar. 22	1000	43° 061	70°25.7'		28	29	32, 42	38.0	38.1
Mar. 22	1100	42°59.41	70° 281	5	29	30		38.0	38.1
Mar. 23	1300	42° 591	70° 22'		35	34	32.63	39.0	39.0
Mar. 23	1415	42°58.81	70° 12'		35	35		39.6	39.6
Mar. 23 Mar. 23	1500 1600	42°56.8' 42°55.4'	70° 00' 69°46.4'		37	36	32.81	39.8	39.9
Mar. 23	1700	42°54.6'	69°32.9'		39 40	38 39	32.75	39.6 40.2	39.7 40.2
Mar. 23	1800	42°54.51	69°20.21		42	41	32.73	40.2	40.6
Mar. 23	1900	42° 551	69°06.31		43	42	32,72	40.1	40.1
Mar. 23	2005	42° 551	68°52.8'		45	44		39.6	39.7
Mar. 23	2100	42°54.31	68°39,21		47	46	32.19	38.7	38.7
Mar. 23	2205	42°53.71	68°24.2'		49	47		39.0	39.0
Mar. 23	2300	42° 531	68°11.5'		50	49	32.36	39.3	39.5
Mar. 23	2400	42°52.61	67° 58'		52	51		39.6	39.6
Mar. 24	0100	42°51.9'	67° 35'		55	53	32.56	39.7	39.8
Mar. 24	0200	42°50.81	67° 301		55	54		39.5	39.5
Mar. 24	0300	42°50.2'	67°16.3'		57	55	32.94	40.3	40.3
Mar. 24	0415	42°49.21	66°58.21		59	58		39.8	39.7
Mar. 24	0500	42°48.6'	66° 491		60	59	32.50	39.4	39.4
Mar. 24	0600	42°47.8'	66° 37'		62	60		37.2	37.4
Mar. 24 Mar. 24	07 00 08 00	42°47.5' 42° 46'	66°23.2' 66°11.2'		63 65	62	31.67	37.4	37.4
Mar. 24 Mar. 24	0900	42°45.21	65°55.71		67	64 65	31.71	37.3 37.6	37.1 37.6
Mar. 24	1000	42 43.2	65°42.21		68	67	31.71	37.6	35.4
Mar. 24	1100	42°43.7'	65°28.41		70	68	31.27	35.5	35.4
Mar. 24	1200	42°42.41	65°14.1'		71	70		35.5	35.3
Mar. 24	1300	42°40.51	64°59.51	6	75	72	31.40	35.5	35.5
Mar. 24	1500	42° 291	64° 591		76	76		35.5	35.5
Mar. 24	1600	42°17.8'	65° 021		79	77	31.25	35.4	35,4
Mar. 24	1700	42°15.6'	65°13.5'		80	79		35.5	35.8

Table 3. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 58, March 19 to April 1, 1955--Continued

		T - 1	T:		Constant	10	Sur	face	10-
Date	Time	Lat- itude N.	Longi- tude W.	l-meter tow	Surface gauze section	10-meter gauze section	Salin- ity	Tem- pera- ture	meter tem- pera- ture
	-						0/	°F.	°F.
3.1 9.1	1000	10010 41	C - 807 01		0.0	0.0	%		
Mar. 24 Mar. 24	1800 1900	42°16.4' 42° 18'	65°27.2' 65° 41'		82 83	80 82	31.51	35.9 35.6	35.8
Mar. 24	2000	42°19.2'	65° 55'		85	83	31.87	37.5	35.7 37.4
Mar. 24	2100	42°20.3¹	66°08.81		87	85		36.4	36.4
Mar. 24	2200	42°21.5'	66° 23'		88	86	32.32	39.1	39.1
Mar. 24	2300	42° 221	66°35,31		90	88		38.3	38.2
					loading 3	loading 3		00.0	00,2
Mar. 25	0115	42°22.51	66°49.5'	7	1	1	31.82	37.8	37.8
Mar. 25	0205	42° 22'	66°57.5'		2	2		38.0	38.5
Mar. 25	0300	42° 21'	67° 10'		4	3	32.85	40.5	40.7
Mar. 25	0400	42°20.3'	67°20.5'		5	5		40.0	40.1
Mar. 25	0500	42°19.8'	67°31.5'		7	6	32.61	40.0	40.0
Mar. 25	0555	42°18.7'	67°41.8'		8	7	- -	39.8	39.9
Mar. 25	07 05	42° 18'	67°52,2'		9	9	32.84	39.9	39.9
Mar. 25	0800	42°17.8'	68°01.5'		11	10		39.9	39.9
Mar. 25 Mar. 25	1000	42°17.3' 42°16.1'	68°19.3'		13	12	32.83	40.1	40.2
Mar. 25	1200 1400	42°13.6'	69°02.51		16 19	15 18	32.61 32.98	39.5 40.9	39.5 40.8
Mar. 25	1600	42°13.4'	69°26.4'		22	21	33, 04	40.8	40.8
Mar. 25	1700	42°13.2'	69°39.81		24	22		40.6	40.6
Mar. 25	1800	42*12.81	69° 531	8	26	25	32.89	40.4	40.5
Mar. 25	2000	42° 13'	70°10.4'		28	27		38.5	38.6
Mar. 25	2100	42°13.5'	70°23.2'		29	29	32.38	38.3	38.3
Mar. 25	2205	42° 151	70° 401		32	31		37.9	37.9
Mar. 25	2300	42°08.51	70° 291		33	33	32.30	38.2	38.3
Mar. 25	2400	42°07.71	70°16.31		35	34		38.1	38.2
Mar. 26	0100	42°07.31	70°01.91		36	36	32.60	39.0	38.9
Mar. 26	0200	41°57.61	69°54.21	~-	39	39		38.7	38.7
Mar. 26	0300	41°44.5'	69° 50¹		41	41	33.03	39.5	39.5
Mar. 26	0400	41°44.6'	69°38.51		41	41		39.4	39.6
Mar. 26	0500	41°44.3'	69° 26¹		43	43		40.4	40.4
Mar. 26	0600	41°44.2'	69°12.3'	9	45	45	22 00	40.4 40.5	40.6
Mar. 26 Mar. 26	0800 0900	41°44.5' 41°45.3'	68°40.7'		51 52	50 51	32.89	40.5	40.1
Mar. 26	1000	41° 45'	68°28.7'		5 4	52	33, 21	41.3	41.5
Mar. 26	1100	41°46.5'	68°13.5'		56	54		41.3	41.6
Mar. 26	1200	41°45.7'	68°01.5'		57	55	33.24	41.4	41.5
Mar. 26	1300	41° 46¹	67°48.21		59	57		40.9	40.9
Mar. 29	0400	41°57.71	69*48.51		65	62	32.98	40.2	40.2
Mar. 29	0515	41° 57'	69°31.8'		67	64		40.3	40.3
Mar. 29	0600	41°56.6'	69°21.7'		68	65	33.17	39.8	39.6
Mar. 29	07 05	41°56.3'	69°06.21		70	66		39.7	39.8
Mar. 29	0805	41°56.2'	68° 52'		72	68	32.74	39.8	39.8
Mar. 29	0900	41°56.6'	68°40.2'		74	69		39.5	39.4
Mar. 29	1000	41° 58'	68° 28'		75	70	32.80	40.0	40.0
Mar. 29	1100	41°58.8'	68° 16'		77	71		40.3	40.3
Mar. 29	1200	41°59.5'	68°01.8'		79	73	32.97	40.6	40.4
Mar. 29 Mar. 29	1300 1400	42° 01' 42° 01'	67°48.8° 67° 33°		80 82	74 76	33.05	40.7 40.4	40.7 40.4
Mar. 49	1400	42 01'	01 33	1	04	10	33.05	40.4	40.4

Table 3.--Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 58, March 19 to April 1, 1955--Continued

							Sur	face	10-
Date	Time	Lat- itude N.	Longi- tude W.	l-meter tow	Surface gauze section	10-meter gauze section	Salin-	Tem- pera-	meter tem- pera-
							Tty	ture	ture
							%.	$^{\circ}\!F$.	°F.
Mar. 29	1500	42° 01'	67°19.21		84	78		40.4	40.4
Mar. 29	1600	42°00.31	67°05.21		86	79	33.03	40.4	40.5
Mar. 29	1700	41°58.3'	66°49.2'		88	80		40.6	40.8
Mar. 29	1800	41°57.5'	66°34.3		90	82	32,89	40.2	40.3
Mar. 29	1900	41°55.4'	66°20.3'	10	91 loading 4	83		39.9	40.1
Mar. 29	2100	41°53.6'	66°06,41		2		32.83	40.2	40.3
Mar. 29	2200	41° 54'	65° 51'		4		52.05	39.9	39.9
Mar. 29	2300	41°54.7'	65° 40'		6		32.31	38.7	39.1
Mar. 29	2400	41°57.81	65°30.5'		7			37.3	37.2
Mar. 30	0100	42°07.31	65° 23'		9		31,50	35.7	35.7
Mar. 30	0200	42°15.8'	65°14.7'		11			35.5	35.5
Mar. 30	0300	42° 24'	65° 08'	~ =	13		31, 44	35.4	35.5
Mar. 30	0400	42°29.51	65°04.41		15			35.5	35.5
Mar. 30	0500	42°28.81	65°14.81		17		31.35	35,5	35.5
Mar. 30	0600	42° 281	65°28.51	1 1	19			35.8	35,8
Mar. 30	0630	42°27.81	65°35.21		20		31.52	35.9	35.9
Mar. 30	0755	42°27.61	65°48.21		21			36,4	36.4
Mar. 30	0905	42° 27'	66° 031		24		31.62	36.7	37.1
Mar. 30	1005	42°26.4'	66° 17'		25			37.2	37.6
Mar. 30	1100	42*24.5	66°26.7'		27		32.06	38.3	38.1
Mar. 30	1200	42° 16'	66°23.2'		29			38,6	38.5
Mar. 30	1255	42° 08'	66° 20'		30		32.31	39.1	39.3
Mar. 30	1400	41°56.3'	66°13.81		33			40.5	40.6
Mar. 30	1500	41° 48'	66°09.4		34		32.74	40.3	40.3
Mar. 30	1600	41°40.2'	66°05.51		35	- -		39.9	40.3
Mar. 30	17 00	41°32.3'	66°00.31	12	38		32.18	38.8	38.9
Mar. 30	1900	41° 29'	66° 14'		39			39.5	39.7
Mar. 30	2000	41°28.6'	66° 24¹		41		32.88	40.7	40.7
Mar. 30	2100	41°27.7'	66°37.21		42			40.5	40.5
Mar. 30 Mar. 30	2200 2300	41°27.3' 41° 31'	66° 491		44		33.13	40.6	40.7
Mar. 30	2400	41°39,81	67°00.21		45 47		33.08	40.6 40.5	40.6 40.5
Mar. 31	0100	41° 47'	66° 55¹		49		33.00	40.3	40.3
Mar. 31	0200	41°46.81	66° 421		50		32.94	40.7	40.3
Mar. 31	0300	41° 47'	66° 341	13	51	!		40.0	40.0
Mar. 31	0400	41°46.5'	66° 21'		53		32.76	40.2	40.4
Mar. 31	0500	41°46.6'	66°05.71		55			40.2	40.2
Mar. 31	0600	41° 47'	65°51.8'		57	i I	32.75	40.2	40.4
Mar. 31	07 00	41° 47'	65°39.71		59			36.4	38.6
Mar. 31	0800	41° 43'	65° 41'		60		31.52	35.5	35.5
Mar. 31	0900	41°35.3'	65°48.71		62			35.9	35.9
Mar. 31	1000	41°27.5'	65°56.21		63		31.73	36.9	36.9
Mar. 31	1100	41°18.21	66° 04'		65			38.9	38.6
Mar. 31	1200	41° 13'	66° 15'		67		32.68	40.7	40.6
Mar. 31	1300	41°10.3'	66°28.51		6,9			41.3	41.6
Mar. 31	1400	41°08.8'	66° 40'		70		33.08	41.4	41.3
7/	1500	41800 41	00050 00		loading 5			44.0	
Mar. 31	1520	41.06.4	66°50.31	14	1			41.2	41.1
Mar. 31	1600	41°05.51	66° 581		2		33.19	40.8	40.8

Table 3, --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 58, March 19 to April 1, 1955--Continued

		Lat-	Longi		Surface	10-meter	Surfa	ace	10- meter
Date	Time	itude N.	Longi- tude W.	l-meter	gauze section	gauze section	Salin- ity	Tem- pera- ture	tem- pera- ture
							%。	°F.	°F.
Mar. 31	1700	41*04.31	67° 091		3		′00	41.1	41.1
Mar. 31	1800	41°02.41	67° 19'		5		33, 29	41.0	41.3
Mar. 31	1900	41°00,41	67°29.21		6			41.1	41.3
Mar. 31	2000	40° 581	67°39.51		8		33, 30	40.9	40.7
Mar. 31	2100	40°54.5'	67° 501		9			40.7	40.7
Mar. 31	2200	40° 52'	68°01.8'		11		33.19	40.6	40.6
Mar. 31	2300	40° 49'	68°13.5'		12			40.8	40.8
Mar. 31	2400	40° 46'	68° 251		14		33.22	41.0	41.0
Apr. 1	0100	40°44.5'	68°37.6'		15			40.8	40.9
Apr. 1	0200	40°42.2'	68°48.81		17		33.19	41.0	41.1
Apr. 1	0300	40°40.2'	69°00.21		19			40.7	40.6
Apr. 1	0400	40° 38'	69° 13'		20		32.99	40.2	40.2
Apr. 1	0500	40°36.8'	69°23.4'		21			40.1	40.3
Apr. 1	0605	40° 37'	69°32.5'		23		32.85	39.8	39.9
Apr. 1	07 00	40°37.5'	69°42.51		24			39.3	39.3
Apr. 1	0800	40° 381	69° 54'		26		32.66	39.8	39.7
Apr. 1	0900	40°42.71	70° 06'		27			39.9	39.9
Apr. 1	1000	40° 48'	70° 18'		29		. 32. 48	38.9	38.7
Apr. 1	1055	40° 551	70° 281		31			39.7	39.5
Apr. 1	1155	40°00.51	70°37.81		33		32.41	39.7	39.5
Apr. 1	1300	41° 09'	70°48.51	15	34			40.8	40.5

Table 4. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 60, April 19 to May 2, 1955

							Suri	face	10-
Date	Time	Lat- itude	Longi - tude	l-meter	Surface	10-meter gauze		Tem-	meter tem-
Date	Time	N.	W.	tow	gauze section	section	Salin-	pera-	pera-
		- ''•	''.		section	Section	ity	ture	ture
				!			%		
]				loading l	loading 1		°F.	°F.
Apr. 19	1300	41°16.5'			1		32.08	42.7	42.7
Apr. 19	1400	41° 09' 41°00.5'	71° 02' 71°01.5'		2 3		32.38	42.0 41.8	42.1
Apr. 19 Apr. 19	1500 1600	41°00.5°	71° 01.5'		5		32.30	41.8	41.8
Apr. 19	1700	40°42.2'	71°01.3'		6		32,53	41.9	42.0
Apr. 19	1800	40° 32'	71°00.8'		8			43.2	43.0
Apr. 19	1900	40° 21'	71° 00'		10		33.11	43.4	43.4
Apr. 19	2000	40°11.5'	70°59.51		12			45.8	45.7
Apr. 19	2100	40° 01'	70°56.71		14		33.44	45.8	46.0
Apr. 19	2200	39°56.7'	70° 44'		15			44.8	44.7
Apr. 19	2300	39° 57'	70°37.5'		16		33.97	48.3	48.3
Apr. 19	2400	39°57.2'	70° 20'	- -	18			47.4	47.4
Apr. 20	0100	39° 58!	70° 11'		20 22		33.46	48.7 42.7	49.0
Apr. 20	0200 0300	39° 56' 39°55.5'	69° 531 69° 431		22		33.39	46.3	46.6
Apr. 20 Apr. 20	0400	39° 55'	69° 33'		24			44.8	44.8
Apr. 20	0500	39° 54'	69° 21'		26		32,75	42.3	42.6
Apr. 20	0600	39° 541	69° 11'		27			45.9	45.9
Apr. 20	0800	39°53.51	68° 57'	1	32	17	33.76	46.7	46.5
Apr. 20	0900	39° 541	68°47.5'		33	18		46.5	46.6
Apr. 20	1005	39°54.51	68°34.5'		35	20	33.58	46.6	46.7
Apr. 20	1115	39°57.51	68° 22'		37	22		46.3	46.5
Apr. 20	1200	39° 581	68°14.5'		38	23	32.21	41.3	41.4
Apr. 20	1300	39°59.3'	68° 01'		40	25		41.2	40.0
Apr. 20	1400	40° 08'	67° 56' 67° 51'		42 44	27 29	31.91	39.7	39.7
Apr. 20 Apr. 20	1500 1600	40°16' 40°22.5'	67°46.5'		47	30	32.11	41.0	40.7
Apr. 20 Apr. 20	1700	40° 31'	67° 41'	2	49	32	32.11	40.9	40.7
Apr. 20	1830	40°43.5'	67°33.8'		51	34	32.25	41.5	10
Apr. 20	2000	40° 57'	67°30.5'		53	38		42.1	41.9
Apr. 20	2100	41° 07'	67° 27'		55	40	32,30	41.6	41.6
Apr. 20	2200	41° 18'	67°19.5'		57	43		41.0	41.1
Apr. 20	2300	41°27.5'	67° 12'		59	45	32.83	41.9	41.9
Apr. 20	2355	41° 36'	67° 06'		61	47		41.8	41.8
Apr. 21	0100	41°44.5'	67° 05'		63	49	32.79	41.6	41.7
Apr. 21	0200	41° 53'	66°55.51		65	51		41.7	41.7
Apr. 21	0300	42° 02¹ 42° 12¹	66° 50' 66° 44'		66 69	53 55	32.84	41.9	41.9
Apr. 21 Apr. 21	0410 0500	42° 19'	66* 39!		70	56	32.19	40.8	40.9
Apr. 21	0625	42° 27'	66° 33'	3	73	60	32.10	41.2	41.1
Apr. 21	0800	42° 43'	66° 25'		76	63	31,55	38.3	37.8
Apr. 21	0900	42°54.51	66°22.51		78	65		38.8	38.7
Apr. 21	1000	43° 05'	66° 171		80	67	31.76	39.5	38.8
Apr. 21	1100	43° 131	66°07.51		82	69		38.8	38.7
Apr. 21	1200	43°18.3'	66°04.21		83	71	31.39	38.8	38.4
Apr. 21	1300	43°27.5'	66°10.3'		84	72		39.1	39.1
Apr. 21	1400	43° 35'	66° 141		86	74	31.55	39.3	39.2
Apr. 21	1455	43° 41' 43° 50'	66°18.2'		87	75	21 64	40.3	39.8
Apr. 21 Apr. 21	1600 1700	44° 00'	66° 25' 66°27,8'		89 91	77 79	31.64	39.7 39.9	39.5 39.6
11p1. 21	1100	1 00.	100 21.0.	1	1 31	""		33.3	39.0

Table 4, --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 60, April 19 to May 2, 1955--Continued

		Lat-	Longi		Surface	10 matax	Surf	ace	10-
Date	Time	itude N.	Longi- tude W.	1-meter tow	gauze section	10-meter gauze section	Salin- ity	Tem- pera-	meter tem- pera-
							10,	ture	ture
							%	° _F .	°F.
Apr. 21	1800	43° 591	66° 42'		93	82	32.29	40.2	40.2
Apr. 21	1900	43° 58'	66°56.51		95	84		3 9.2	39.1
Apr. 21	2005	43° 571	67° 10'		96	86	31.97	40.6	40.6
Apr. 21	2105	43° 56'	67° 24'		98	88		41.4	41.3
Ann 21	2320	43°54.5	67° 441	4	loading 2	loading 2	22 20	41 5	41 =
Apr. 21 Apr. 22	0140	43 461	67° 59'		1 4	1 4	32.30 32.19	41.5	41.5
Apr. 22 Apr. 22	0300	43° 43'	68°16.2'		7	7	32.19	41.3	41.3
Apr. 22	0400	43°40.5'	68° 291		9	9	32.31	41.2	41.3
Apr. 22	0500	43°38.51	68° 41'		10	10		40.7	40.2
Apr. 22	0600	43° 361	68°55.31		12	12	32.10	40.1	39.5
Apr. 22	0700	43° 34'	69° 10'		14	14		42.3	41.0
Apr. 22	08 05	43°31.5'	69° 23'		16	16	32.46	42.4	42.1
Apr. 22	0900	43°29.3'	69°35.51		18	17		41.9	41.1
Apr. 22	1005	43°28.5'	69°50.7'		19	19	31.72	42.5	41.4
Apr. 22	1105	43°19.51	70°01.3'		21	21		43.2	42.7
Apr. 22	1205	43°11.5' 43°05.2'	70° 12' 70°17.3'		23 25	23 24	29.60	44.0	41.0
Apr. 22 Apr. 22	1300 1400	42°58.5'	70°23.5		26	26	30,58	43.9 42.7	39.9
Apr. 22	1500	42°57.51	70°09.21		27	27	30.36	42.9	41.9
Apr. 22	1600	42°57.1'	70°01.2'	5	29	30	32,02	41.3	40.9
Apr. 22	1810	42°55.81	69° 371		32	33		42.1	42.1
Apr. 22	1925	42° 561	69° 24'		34	35	32.72	42.5	42.5
Apr. 22	2005	42° 56'	69° 15'		35	36		42.4	42.4
Apr. 22	2105	42°56.21	69°02.1'	i	37	38	32.41	41.5	41.1
Apr. 22	2200	42° 56'	68°47.5'		39	40		41.2	40.8
Apr. 22	2300	42°55.51	68° 34'		41	42	32.34	41.4	41.4
Apr. 22	2400	42° 551	68° 21'		43	44		41.4	41.4
Apr. 23	0120 0140	42°54.5¹	68° 031 67° 581		45 46	46 47	32.32	41.2 41.2	41.2
Apr. 23 Apr. 23	0300	42°53.8'	67°40.51	1	48	49	32.32	41.2	40.8
Apr. 23	0400	42*53.31	67° 251		50	51	32.32	40.6	40.2
Apr. 23	0500	42° 53¹	67° 12'		52	53	32,05	40.5	40.4
Apr. 23	0600	42*52,41	67° 00'		54	54		41.0	41.0
Apr. 23	0705	42 52 1	66° 421		56	57	31.72	39.6	39.9
Apr. 23	0805	42° 51'	66° 27 '		58	59		38.8	38.5
Apr. 23	0905	42*50.51	66° 16'		60	61	31.88	39.0	38.9
Apr. 23	1010	42° 50'	66°08.31	6	61	62	31.97	39.2	39.0
Apr. 23	1105	42° 491	65°54.5'		63	63		39.4	39.1
Apr. 23	1205	42° 471	65°40.7'		64	64	31.42	39.9	39.5
Apr. 23	1300	42°44.2'	65° 26'		86	66	21 20	39.7	38.9
Apr. 23	1400	42° 42¹ 42°39.7¹	65° 13' 64° 59'		68	68	31.28	39.6	39.5
Apr. 23 Apr. 23	1500 1600	42°31.5°	64°58.31		70 71	70 72	31.17	38.4 38.5	38.2
Apr. 23	1700	42 31.5	65°01.5'		73	74	31.11	37.2	36.6
Apr. 23	1800	42°15.7'	65°12.2'		77	76	31.59	37.7	37.0
Apr. 23	1900	42° 16'	65° 29'		79	79	31.33	38.4	38.2
Apr. 23	2000	42°15.71	65°43.51		80	80	31, 34	38.5	38.3
Apr. 23	2110	42*15.71	66° 02'		83	82		41.2	41.2

Table 4.--Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 60, April 19 to May 2, 1955--Continued

							Suri	ace	10-
_		Lat-	Longi-	l-meter	Surface	10-meter			meter
Date	Time	itude	tude	tow	gauze	gauze	Salin-	Tem-	tem-
		N.	W.		section	section	ity	pera- ture	pera- ture
									ture
							%	0-	0-
A 0.0	2205	42°15.5'	66° 16'		0.5	0.4		°F.	°F.
Apr. 23 Apr. 23	2205 2305	42 15.5	66°31.2'		85 86	84 86	32.44	41.5 41.7	41.5
Apr. 23	2303	42 10	00 31.2		loading 3	loading 3		41.7	41.5
Apr. 24	0200	42*15.81	66°45.71	7	1	1	32,66	41.6	41.0
Apr. 24	0300	42°15.81	66°51.81		2	2		41.5	41.8
Apr. 24	0400	42°16.7'	67°06.2'		4	4	32,26	41.8	41.5
Apr. 24	0500	42°17.1'	67°19.5'		6	5		41.4	40.6
Apr. 24	0600	42° 18'	67°33.41		8	7	32.31	41.0	40.7
Apr. 24	0700	42°18.7' 42°17.8'	67° 481		10	9		41.6	41.5
Apr. 24 Apr. 24	0810	42°16.3	68°04.2' 68°15.5'		12 14	11 13	32.32	41.8 41.9	41.3
Apr. 24	1005	42°17.4'	68°30.5'		16	15	32.51	41.1	40.7
Apr. 24	1105	42°18.1'	68° 47!		19	17		43.2	42.2
Apr. 24	1210	42°18.5'	69°03.5'		21	20	32.56	43.4	42.6
Apr. 24	1310	42°17.5'	69°15.4'		23	21		43.1	42.5
Apr. 24	1400	42°16.5'	69° 26'		24	23	32.09	42.9	42.6
Apr. 24	1530	42° 15'	69°53.5'		31	29		43.0	42.9
Apr. 24	1625	42° 10'	70° 07'	8	35	33		43.1	41.2
Apr. 27	1300	42° 16'	69° 361		29	27		42.0	40.0
Apr. 27 Apr. 27	1550 1700	42°14.2' 42°10.5'	70° 12' 70°06.5'		34 35	32 34	32.55	40.2	40.2
Apr. 27 Apr. 27	1800	42 10.3	69°57.1'		37	35	32.25	40.6 40.8	40.8
Apr. 27	1905	41°51.8'	69°47.5'		39	37		41.3	41.2
Apr. 27	2000	41°44.5'	69° 38'		40	39	32, 30	41.4	41.3
Apr. 27	2100	41° 44'	69° 241		42	40		42.0	42.0
Apr. 27	2200	41°43.5'	69°10.6'		44	42	32.59	42.0	41.9
Apr. 27	2305	41° 44'	68° 551		46	44		42.2	41.8
Apr. 27	2400	41° 46'	68° 451		47	45	32.70	42.2	41.9
Apr. 28	0118	41°47.8	68°28.21		49	48 49	20.75	42.6	42.4
Apr. 28 Apr. 28	0200	41°48.7'	68°18.71		50 52	51	32.75	42.3 42.6	42.3 41.9
Apr. 28	0400	41°51.8'	67°51.5'		54	52	32,97	42.6	42.6
Apr. 28	0500	41°53.8'	67°34.6'		56	55		43.2	43.2
Apr. 28	0600	41°54.4'	67° 21'		57	56	32.86	43.0	43.2
Apr. 28	0700	41°51.2'	67°09.2'		59	58		42.7	42.8
Apr. 28	0800	41° 44¹	66*55.51		61	61	32.84	42.3	42.3
Apr. 28	0905	41*41.6'	66*41.2		62	62		42.6	42.6
Apr. 28	1000	41°40.81	66°29.8'		64	64	32.74	42.2	42.1
Apr. 28 Apr. 28	1110 1240	41°41.8' 41°44.5'	66°15.3'	9	66 67	66 67	31.95	43.1 40.6	42.2
Apr. 28	1400	41° 46'	65°50.7'		71	71	31.93	37.4	37.4
Apr. 28	1500	41°45,21	65° 43'		72	72	31.95	39.3	40.0
Apr. 28	1600	41° 35'	65° 54'		75	75	31.00	39.1	38.1
Apr. 28	1700	41°27.4'	66°02.21		77	77	32.24	39.6	38.8
Apr. 28	1800	41°20.2'	66°10.21		78	79		39.1	39.5
Apr. 28	1900	41°14.5'	66°18.8'		81	81	31.36	39.8	39.2
Apr. 28	2000	41°14.2'	66°31.4'		82	82		39.2	39.5
Apr. 28	2100	41° 14'	66°44.6'		84	84	32.27	42.9	41.4
Apr. 28	2200	41*15.1	00, 28,		86	86	- -	41.9	41.8

Table 4. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 60, April 19 to May 2, 1955--Continued

_		Lat-	Longi-		Surface	10-meter	Surf	ace	10- meter
Date	Time	itude N.	tude W.	l-meter tow	gauze	gauze	Salin-	Tem- pera-	tem-
							ity	ture	ture
					loading 4	loading 4	%00	°F.	°F.
Apr. 29	0020	41°14.2'	67°14.8'	10	1	1	32.56	42.1	42.1
Apr. 29	0300	41°14.3'	67° 33'		3	3		42.8	42.8
Apr. 29	0400	41°15.4'	67°49.51		5	5	32.45	41.9	41.9
Apr. 29	0500	41°16.5'	68° 04'		7	8		42.4	42.4
Apr. 29	0905	41°09.51	68° 081		9	9	32.99	43.3	43.3
Apr. 29	0955	41°08.2'	68°17.7'		10	10		43.3	43.3
Apr. 29	1115	41°13.8'	68°26.21		11	12	32.95	42.9	42.9
Apr. 29	1300	41°19.3'	68°42.2'		14	14		42.0	42.1
Apr. 29	1400	41°14.3'	68°50.21		15	16	32.97	41.6	41.3
Apr. 29	1500	41°08.31	68° 50'		16	17		42.7	42.6
Apr. 29	1600	41°01.8'	68°49.3'		17	18	33.12	43.0	42.8
Apr. 29	1700	40°57.2'	68°49.4'		18	19		43.3	43.2
Apr. 29	1800	40°48.3'	68°48.5'	11	20	20	32.82	42.9	42.5
Apr. 30	1210	40°40.7'	68°30.4'		23	24	32.57	42.6	42.4
Apr. 30	1300	40° 40'	68° 24'		24	25	00.00	42.2	42.1
Apr. 30	1400	40°39.51			25	26	32.22	43.3	43.3
Apr. 30	1500	40°39.51	67°53.5		27	28 30	32. 22	41.7	41.7
Apr. 30	1600	40°39.5'			28 30		32.22	41.5	39.6
Apr. 30 Apr. 30	17 00 18 00	40°39.4'			32	31 33	32.20	39.6 41.0	41.2
Apr. 30	1900	40°39.4'	67°13.4'		33	35	32.20	40.1	40.1
Apr. 30	2000	40°40.51	67°01.7'		35	37	32.88	45.9	45.9
Apr. 30	2100	40°41.8'	66°49.3'		37	39		46.3	46.4
Apr. 30	2200	40° 47 ¹	66°40.8'		38	41	32.74	45.3	45.3
Apr. 30	2300	40°45,41	66° 351		40	43		45.0	46.2
Apr. 30	2400	41°04.1'	66°31.2'		42	45	32.64	43.9	44.2
May 1	0100	41°08.3'	66°29.21		43	46		40.2	40.7
May 1	0200	41° 15'	66° 26'		44	47	32.31	40.8	40.8
May 1	0300	41°19.2'	66°24.11		45	48		38.6	39.3
May 1	0400	41°27.21	66°20.21		46	50	31.82	37.8	37.9
May 1	0500	41°35.81	66° 16'		48	51		38.8	39.4
May 1	0600	41°45.2'	66°11.1'		49	53	32.07	39.3	39.5
May 1	0700	41*55.51	66°06.21		50	55		40.2	40.5
May 1	0820	42°05.71	66°00.31	12	53	57	32.63	42.1	41.8
May 1	0900	42°11.4'	65°53.81		54	59		38.2	38.5
May 1	1000	42° 20'	65° 45'		56	61	31.53	39.6	39.4
May 1	1115	42°30.41	65° 35'		59	63	01 00	39.6	38.0
May 1	1215	42°39.51	65° 30'		60	65	31.28	39.9	39.3
May 1	1300	42°47.8'	65°27.21		62	67	31, 21	40.2	39.2 38.8
May 1	1400	42°54.51	65°22.21		63	68 70	31.21	39.9	38.8
May 1	1500	42° 57' 42° 58'	65°23.6' 65° 41'		64 66	72	31.18	39.8	38.9
May 1	1600 1700	42°58,21	65°57.8'		69	74	31.10	39.2	38.1
May 1 May 1	1800	42*48.81	65°53.21		70	76	31.46	40.3	39.2
May 1	1900	42 40.0	65°48.21		71	77	31.40	39.8	38.5
May 1	2000	42° 321	65° 431		73	79	31.45	39.7	39.2
May 1	2100	42°22.3'	65°35.81		75	82	31.40	38.6	38.0
May 1	2200	42°14¹	65° 331		77	84	31.43	37.4	37.5
May 1	2300	42° 07'	65° 45'		79	86		38.8	38.3
Nay 1	2400	42° 00'	65°57'		81	88	32.19	41.8	41.7
7	1	1		I	1	1	1		1

Table 4. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections *Albatross III* cruise no. 60, April 19 to May 2, 1955--Continued

					G f	10	Surf	ace	10- meter
Date	Time	Lat- itude N.	Longi - tude W.	l-meter tow	Surface gauze section	10-meter gauze section	Salin- ity	Tem- pera- ture	tem- pera- ture
							%	°F.	°F.
May 2	0100	41°52.3'	66° 071		83	90		42.3	40.3
May 2	0200	41°46.3'	66°17.4'		84	92	32.79	42.8	42.5
May 2	0300	41°36.8'	66°27.7'		85	93		42.1	
May 2	0400	41° 28'	66° 391		87	96	32,58	44.8	44.2
May 2	0500	41°20.4'	66° 491	13	89	98		43.7	43.2
	0000	12 2011	00 10		loading 5				
May 2	0720	41°18.3'	67°02.4'	- -	1		32.65	42.6	41.3
May 2	0810	41° 14'	67°11.6'		2			42.8	42.1
May 2	0900	41°09.5'	67°20.3'		4		32.53	43.3	43.2
May 2	1000	41° 03'	67° 30'		6			43.6	42.8
May 2	1110	40°55.6'	67° 43'		8		32, 29	43.8	43.0
May 2	1210	40° 48'	67°55,41		9			43.4	42.8
May 2	1300	40°43.3'	68°04.21	- -	11		32.25	43.9	43.5
May 2	1400	40°36.71	68°11.4'	14	12			42.6	42.2
May 2	1500	40°34.7'	67°59.81		14		31,80	41.5	40.8
May 2	1600	40°32.8'	67°47.41		15			41.1	40.0
May 2	1700	40°30.7'	67° 351		16		31.82	42.0	41.2
May 2	1800	40°32.7'	67°29.5'		17			46.5	45.8
May 2	1900	40°32.5'	67° 45'		21		31.97	41.9	41.6
May 2	2005	40° 32'	68°01.6'		24			42.0	41.3
May 2	2120	40°30.7'	68°10.7'		25		32.03	41.1	40.9
May 2	2200	40°29.8'	68° 19'		26			40.9	40.7
May 2	2300	40°28.21	68° 321		27		31.93	43.1	42.7
May 2	2400	40° 27'	68°45.81		29			43.3	43.3
May 3	0100	40°25.31	69°01.21		31		32, 20	42.3	42.3
May 3	0200	40° 26'	69° 15'		33			43.8	43.7
May 3	0300	40°29.41	69°29.3'		35			44.4	43.6
May 3	0400	40°30.6'	69°42.81		37		32.39	44.1	43.9
May 3	0500	40°33.7'	69° 55'		38			43.8	43.7
May 3	0600	40°38.5'	70°07.71		40	•	32, 40	44.4	43.0
May 3	0700	40°48.51	70° 201		43			44.3	13.9
May 3	08 05	40° 571	70° 31'		44		32.66	45.6	43.5
May 3	0900	41°03.4'	70° 40¹		46			46.7	43.4
May 3	1000	41°10.4'	70°48.81	15	47		32.22	48.4	44.0
					<u> </u>				

Table 5. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections *Albatross III* cruise no. 61, May 16-28, 1955

		Lat	Lanai		Surface	10-meter	Sur	face	10- meter
Date	Time	Lat- itude N.	Longi- tude W.	1-meter tow	Surface gauze section	gauze section	Salin- ity	Tem- pera- ture	tem- pera- ture
				!	loading 1	loading 1	%。	°F.	$^{\circ}F$.
May 16	1115	40°17.3'	71° 00'		1	1	32.33	49.7	49.5
May 16	1200	41°10.9'	70°54.8'		2	2		49.0	47.9
May 16	1300	41°02.6'	70°47.81		3	4	32, 42	49.5	49.0
May 16	1400	40°53.6'	70°41.2'		5	6		49.1	48.5
May 16	1500	40°43.71	70°33.7'		6	9	32,66	49.3	48.3
May 16	1600	40°35.31			8	11		47.9	47.3
May 16	1700	40°26.81	70°19.21		10	13	32.34	47.4	46.4
May 16	1800	40°18.9'	70°13.6'		11	15		48.2	48.0
May 16	1900	40°09.5'	70°06.31		12	17	32,14	48.8	48.8
May 16	2000	40° 001	70° 00'		14	19		48.3	48.1
May 16	2100	40°00.21	69°45.7'		16	22	32.07	47.9	47.9
May 16	2200	40°00.4	69°31.8'		17	24		48.8	48.7
May 16	2300	40° 00'	69°16.7'		19	26	32.20	47.4	47.4
May 16	2400	40° 00'	69°18.8'	~ -	19	26		46.8	46.7
May 17	0200	39°59.31	68°51.2'	1	31	41	31.54	47.7	47.7
May 17	0300	39° 591	68° 37 ¹		33	44		50.3	50.3
May 17	0400	39° 591	68°23.3'		35	45	32, 92	50.1	50.1
May 17	0500	39° 591	68° 10'		37	47		50.0	49.6
May 17	0600	40°00.41	67°58.1'		38	49	32.92	50.1	50.0
May 17	0800	40°18.9'	67°47.3'		42	53	33.13	50.3	50.3
May 17	0900	40°27.61	67°41.3'		44	55		48.1	50.5
May 17	1000	40°36.8'	67°36.41		45	56	32,51	45.5	45.4
May 17	1100	40°45.81	67°31.8'		47	58		45.5	45.5
May 17	1200	40°54.6'	67°27.8'		48	60	32.64	45.7	45.7
May 17	1300	41°03.81	67°23,4'		49	62		44.2	44.3
May 17	1400	41°13.3'	67°17.4'		50		32.79	44.8	44.9
May 17	1500	41°23.3'	67°13.8'					45.2	45.1
May 17	1600	41°33.3'	67°10.2'				32.84	45.3	45.2
May 17	1700	41°43.8'	67°05.81					44.6	44.7
J					loading 2	loading 2			
May 17	1800	41°53.3'	66°58.81	2	1	1	32.95	44.3	44.3
May 17	2000	42°05.71	66°52.81		3	3		44.0	44.1
May 17	2105	42°16.81	66°45.51		5	5	32.44	45.5	45.3
May 17	2200	42°24.3'	66°38.71		6	7		45.0	44.9
May 17	2300	42°30.8'	66°30'		8	8	31.51	42.1	41.3
May 18	0010	42°39.51	66°19.91		10	10		42.8	42.0
May 18	0200	42°57.61	66°10.6'		13	14	31.30	39.6	39.4
May 18	0300	43°07.81	66°06.21		15	16		40.8	40.8
May 18	0400	43°14.8'	66° 091		17	18	31.32	40.5	40.7
May 18	0500	43°14.81	66°24.9'		19	20		40.5	40.5
May 18	0600	43°14.61	66°39.31		21	22	31.56	41.2	40.7
May 18	07 05	42° 16'	66° 551		23	24		44.3	43.0
May 18	0800	43° 18'	67°08.91		25	26	32.34	44.9	44.6
May 18	0905	43°19.5'	67° 22'		26	28		44.8	44.6
May 18	1000	43°26.11	67° 11'		28	30	32.32	45.3	45.2
May 18	1100	43°31.5'	66°58.91		30	32		44.7	44.4
May 18	1200	43°37.21	66°46.3'	3	33	35	31.59	44.2	43.9
May 18	1400	43°45.3'	66°29.9'		35	37		42.9	42.4
	1500	43°52.4'	66°21.8'		37	39	31.67	42.5	42.0
May 18									

Table 5. -- Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 61, May 16-28, 1955--Continued

Date Time Latitude N.										,
Date Time N. W. Section Salin Salin Detail N. W. Section Section Salin Detail Det			T of	Longi		Surface	10 meter	Surf	ace	
May 18	Data	Time			1-meter		I.	1	Tem-	
May 18 1700 44°03.6¹ 66°47.7¹ 41 43 31.67 42.1 41.9 May 18 1800 44°14.8¹ 67°13.4¹ 43 44 42.2 42.0 May 18 1800 44°14.8¹ 67°13.4' 46 49 41.8 41.3 May 18 2000 44°18.5¹ 67°25.9¹ 46 49 41.8 41.3 May 18 2100 44°20.1 67°20.1 47 51 31.46 41.5 41.2 May 18 2200 44°20.1 67°20.1 47 51 31.46 41.5 41.2 May 18 2200 44°20.1 67°36.3¹ 49 52 41.8 41.6 May 18 2200 44°27.1 68°30.6¹ 54 57 42.2 41.4 May 19 0100 44°23.8¹ 66°30.6¹ 54 57 42.2 41.4 May 19 0100 44°23.8¹ 66°30.6¹ 55 55 59 30.91 42.3 41.9 May 19 0100 44°24.2¹ 66°48.2¹ 57 61 42.2 41.4 May 19 0400 44°04¹ 66°57.3¹ 59 62 31.76 43.6 43.1 May 19 0500 43°3.7.8 67°13.8¹ 46 62 65 32.26 44.4 44.4 May 19 0500 43°30.8¹ 66°13.8¹ 4 62 65 32.26 44.4 44.4 May 19 0755 43°46.8¹ 66°30.1 66 71 31.47 41.9 41.8 May 19 1000 43°4.5¹ 66°37.4 66 71 31.47 41.9 41.8 May 19 1000 43°4.5 66°37.4 68 73 41.4 41.5 May 19 1155 43°2.9¹ 66° 13¹ 72 77 40.9 40.9 May 19 1150 43°23.4¹ 66°22.1 70 75 31.73 41.1 40.9 May 19 1500 43°37.8 67°02.8 68 73 41.4 41.5 May 19 1500 43°30.4 40° 66°32.7 72 77 40.9 40.9 May 19 1500 43°37.8 67°02.8 68 73 41.4 41.5 May 19 1500 43°30.4 40° 66°32.7 72 77 40.9 40.9 May 19 1500 43°30.4 66°32.7 72 77 40.9 40.9 May 19 1500 43°30.4 66°32.7 72 77 40.9 40.9 May 19 1500 43°30.4 66°32.7 72 77 43.6 42.4 42.3 May 19 1500 43°30.4 66°32.7 72 77 43.6 42.4 42.3 May 19 1500 43°30.4 66°32.7 72 77 43.6 42.4 42.3 May 19 1500 43°30.4 66°32.7 72 77 43.6 6.2 44.8 May 19 1500 43°30.4 66°31 72 77 82 31.73 41.1 40.9 May 19 1500 43°30.4 66°31 72 77 82 31.73 41.1 40.9 May 19 1500 43°30.8 68°37.2 72 77 43.6 43.6 43.7 May 19 1500 43°30.8 68°31 72 77 43.6 6.3 43.6 43.7 May 19 1800 43°30.4 66°31 72 77 78 82 31.70 44.4 44.4 May 19 2000 43°30.8 68°31 72 77 78 82 31.70 44.4 44.4 May 19 2000 43°30.8 68°31 72 77 78 84 45.6 43.6 43.7 May 20 1000 44°40.7 66°31 72 73 73 73 74 74.7 46.8 May 20 1000 42°43.8 67°13.8 44.8 44.8 4 44.5 44.8 May 2	Date	Time			tow			Salin-	1	1
May 18			14.	٧٠.		section	section	ity		
May 18 1700 44*03.6 66*47.7 41 43 31.67 42.1 41.2 42.2 42.2 42.2 42.0 May 18 1900 44*14.8 67*13.4 44 47 31.35 42.3 42.0 May 18 2000 44*18.5 67*20! 47 51 31.46 41.8 41.3 May 18 2200 44*20.7 67*90! 47 51 31.46 41.5 41.2 May 19 0100 44*24.2 66*41.2 52 56 31.07 41.8 41.8 May 19 0100 44*20.7 66*39! 55 59 30.91 42.2 41.4 May 19 0300 44*10.8 66*30! 57 61 42.2 41.8 May 19 0500 43*57.3 66*57.1 60 64 43.2 43.0 May 19									l	
May 18 1800 44* 09! 67*00.3!	May 18	1700	44°03.6'	66°47.7'		41	43	31.67	42.1	41.9
May 18 1900 44*14.8 67*13.4 44 47 31.35 42.3 42.0 May 18 2000 44*2.0 67*2.0 47 51 31.46 41.8 41.2 May 18 2400 44*2.0 67*2.0 47 51 31.46 41.5 41.2 May 19 0100 44*23.8 66*30.6 54 57 42.0 41.8 41.3 May 19 0300 44*10.8 66*36.9 55 59 30.91 42.3 41.9 May 19 0300 44*10.8 66*48.2 57 61 42.2 41.4 May 19 0500 43*57.3 67*05.7 60 64 43.2 43.0 May 19 0500 43*45.8 67*13.8 4 62 65 32.26 44.4 44.2 May 19 0500 43*45.8 <t< td=""><td></td><td></td><td>44° 091</td><td>67°00.31</td><td></td><td>43</td><td>44</td><td></td><td></td><td>42.0</td></t<>			44° 091	67°00.31		43	44			42.0
May 18 2000 44*18.5¹ 67*25.9¹ 46 49 41.8 41.3 May 18 2100 44*20.¹¹ 67*08.3¹ 49 52 41.8 41.6 41.3 May 18 2400 44*20.²¹ 66*30.6¹ 52 56 31.07 41.6 41.3 May 19 0100 44*21.3¹ 66*30.6¹ 55 56 31.07 41.6 41.3 May 19 0200 44*10.8¹ 66*48.2¹ 57 61 42.2 41.8 May 19 0400 44*0.8¹ 66*48.2¹ 57 61 42.2 41.8 May 19 0400 43*57.3¹ 66*48.2¹ 59 62 31.76 43.6 43.1 May 19 0500 43*50.8¹ 67*13.8¹ 4 62 65 32.26 44.4 44.4 May 19 1000 43*40.8²			44°14.8'	67°13.4'		44	47	31.35	42.3	42.0
May 18 2100 44° 201 67° 20¹ 47 51 31.46 41.5 41.5 May 18 2400 44°20.7¹ 66°80.6¹ 52 56 31.07 41.6 41.3 May 19 0100 44°23.8¹ 66°30.6¹ 52 56 31.07 41.6 41.3 May 19 0300 44°10.8¹ 66°48.2¹ 55 59 30.9¹ 42.3 41.8 May 19 0300 44°10.8¹ 66°48.2¹ 57 61 42.2 41.4 May 19 0500 43°50.8¹ 67°13.8¹ 4 62 65 32.26 44.4 44.4 May 19 0705 43°46.8¹ 67°02¹ 64 69 41.2 41.2 May 19 1000 43°4.5¹ 66°35.3¹ 68 73 41.4 41.5 May 19 1300 43°24.6¹ 66°32.2¹		2000	44°18.5'	67°25.9'		46	49		41.8	41.3
May 18 2200 44°20.7¹ 67°08.3¹ 49 52 41.8 41.6 A1.8 May 18 2400 44°24.2¹ 66°30.6¹ 52 56 31.07 41.6 41.8 May 19 0200 44°10.8¹ 66°30.6¹ 57 61 42.0 41.8 May 19 0400 44°0.4¹ 66°57.3¹ 57 61 42.2 41.4 May 19 0500 43°57.3¹ 67°13.8¹ 60 64 43.2 43.0 May 19 0600 43°57.3¹ 67°13.8¹ 60 64 41.2				67° 20'		47	51	31.46		
May 18 2400 44°24.2¹ 66°41.2¹ 52 56 31.07 41.6 41.3 May 19 0200 44°17.7¹ 66° 39¹ 55 59 30.91 42.3 41.8 May 19 0300 44°10.8¹ 66°48.2¹ 57 61 42.2 41.8 May 19 0500 43°57.3¹ 67°05.7¹ 60 64 43.2 43.0 May 19 0600 43°50.8¹ 67°05.7¹ 60 64 43.2 43.0 May 19 0900 43°46.8¹ 67°02¹ 64 69 41.2 41.2 May 19 1000 43°24.8¹ 66°35.3¹ 68 73 41.2 41.2 May 19 1100 43°23.4¹ 66°21.2¹ 70 75 31.73 41.1 40.9 May 19 1300 43°28.5¹ 66°37.8¹				67°08.3'		49	52	1		41.6
May 19 0100 44°23.81 66°30.61 54 57 42.0 41.8 May 19 0200 44°17.71 66°39! 55 59 30.91 42.3 41.4 May 19 0400 44°04¹ 66°57.3¹ 57 61 42.2 41.4 May 19 0500 43°57.3¹ 67°05.7¹ 60 64 43.2 43.0 May 19 0600 43°57.3¹ 67°13.8¹ 4 62 65 32.26 44.4 44.2 May 19 0900 43°44.5¹ 66°47.4¹ 66 71 31.73 41.9 41.8 May 19 1100 43°24.¹ 66°35.3¹ 66 71 31.73 41.4 41.5 May 19 1100 43°24.¹ 66°37.3¹ 68 73 41.4 41.5 May 19 1400 43°27.4¹ 66°37.3¹		2400	44°24.2'	66°41.2'		52	56	31.07	41.6	41.3
May 19 0200 44*17,7' 66* 39! 55 59 30.91 42.3 41.9 May 19 0400 44*10,8' 66*48.2' 57 61 42.2 41.4 May 19 0500 43*50.3' 67*05,7' 60 64 43.2 43.0 May 19 0500 43*50.3' 67*05,7' 60 64 43.2 43.0 May 19 0755 43*46.8' 67*02.' 64 69 41.2 41.2 May 19 100 43*34.5' 66*37.3' 68 73 41.4 41.8 May 19 1100 43*32.4' 66*37.3' 68 73 41.4 41.8 May 19 1100 43*22.1' 66*31.3' 70 75 31.73 41.4 41.8 May 19 1300 43*27.8' 66*37.8'		0100	44°23.8'			54	57		42.0	41.8
May 19 0300 44*0.48* 66*6*8.2" 57 61 42.2 41.4 May 19 0500 43*57.3* 67*05.7* 59 62 31.76 43.6 43.1 May 19 0600 43*57.3* 67*05.7* 60 64 43.2 43.1 May 19 0755 43*46.8* 67*0.2* 64 69 41.2 41.2 44.4 44.5 44.5 43.2 11.8 44.5 66*37.3* 66*37.3 70 75 31.73 41.1 40.5 44.9 44.5 44.5 44.5 44.5 44.5 44.5 44.5 <								30.91		
May 19 0400 44* 04* 66*57.3* 59 62 31.76 43.6 43.1 May 19 0500 43*57.3* 67*05.7* 60 64 43.2 43.0 May 19 0600 43*55.3* 67*02* 64 69 41.2 41.2 May 19 0000 43*46.5* 66*27.3* 64 69 41.2 41.2 May 19 1000 43*34.5* 66*27.3* 68 71 31.47 41.9 41.8 May 19 1100 43*32.4* 66*22.* 70 75 31.73 41.4 41.5 May 19 1300 43*22.8* 66*37.8* 72 77 40.9 40.9 May 19 1500 43*27.4* 66*50.7* 77 82 31.70 43.4 42.0 May 19 1600 43*30.5* 67*02.2*										
May 19 0500 43°57.3' 67°05.7' 60 64 43.2 43.0 May 19 0600 43°50.8' 67°13.8' 4 62 65 32.26 44.4 44.4 44.4 44.4 44.1.2 44.2 <		0400	44° 04'	66°57.31		59	62	31.76		
May 19 0600 43°50.8' 67°13.8' 67°02' 64 69 41.2 41.1 40.9 41.0 41.1 40.9 May 19 1800 43°27.4' 66°37.8' 66°37.8' 76 80 41.0 41.1 41.0 41.1 41.0 41.1 42.0 44.1 44.2 3 45.6 42.4 42.0 <th< td=""><td></td><td>0500</td><td>43°57.3'</td><td>67°05.71</td><td></td><td>60</td><td>64</td><td></td><td>43.2</td><td>43.0</td></th<>		0500	43°57.3'	67°05.71		60	64		43.2	43.0
May 19 0755 43°46.8¹ 67°02¹					4			32, 26		
May 19 0900 43°44.5¹ 66°47.4¹ 66 71 31.47 41.9 41.8 May 19 1100 43° 40¹ 66°35.3¹ 68 73 41.4 41.5 May 19 1155 43° 29¹ 66° 13¹ 72 77 40.9 40.9 May 19 1300 43°27.8¹ 66°37.8¹ 72 77 40.9 40.9 May 19 1400 43°27.8¹ 66°37.8¹ 76 80 41.0 41.1 May 19 1500 43°27.8¹ 66°37.8¹ 77 82 31.70 43.4 42.0 May 19 1600 43°29.6¹ 67°02.2¹ 77 82 31.70 43.4 42.0 May 19 1800 43°30.4¹ 67°43.5¹ 31 1 - 45.2 44.8 May 19 200 43°30.5¹ 68°11.9¹										
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May 19 2200 43°30.5¹ 68°11.9¹ 6 6 32.30 45.8 45.7 May 19 2300 43°30.6¹ 68°26.8¹ 8 7 43.6 43.7 May 20 0005 43°30.7¹ 68°42.1¹ 10 10 31.84 44.1 43.6 May 20 0105 43°31.¹¹ 68°56.2¹ 11 12 44.4 44.4 May 20 0300 43°30.8¹ 69°22.3¹ 14 16 46.3 45.5 May 20 0405 43°30.9¹ 68°37.2¹ 16 18 30.20 47.8 47.4 May 20 0500 43°31.¹ 68°51¹ 16 18 30.20 47.8 47.4 May 20 0600 43°19.1¹ 70°09.4¹ 20 22 24 47.7 46.8 May 20 1000 42°56.8¹ <t< td=""><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td>32.31</td><td></td><td></td></t<>					1			32.31		
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Table 5. --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 61, May 16-28, 1955--Continued

		Lat-	Longi		Surface	10-meter	Sur	face	10-
Date	Time	itude N.	Longi- tude W.	l-meter tow	gauze section	gauze section	Salin- ity	Tem- pera- ture	tem- pera- ture
							0/	0-	0-
							%	°F.	°F.
May 20	2300	42°47.71	67°10.5'		52	57	32.32	46.4	46.1
May 20	2400	42°47.1'	66°55.21		55	59	32.37	46.8 45.8	46.2 46.2
May 21 May 21	0100 0200	42°46.3° 42°45.3°	66°39.5' 66°23.9'		57 59	61 63	34.31	42.8	42.0
May 21	0300	42°44.71	66°08.1'		61	65	31,50	42.5	41.5
May 21	0400	42°43.81	65°55.2'		63	67	31.00	42.2	41.4
May 21	0500	42° 431	65°42.4'		64	69	31.20	43.0	42.0
May 21	0600	42°42.21		7	66	72		42.2	41.8
May 21	0800	42°39,41	65° 081		71	74	31, 27	42.3	41.6
May 21	0900	42°36.41	64°51.4'		7.3	77		43.2	42.2
May 21	1000	42°30.71	64°38.91		75	79	31.74	43.1	42.8
May 21	1100	42°21.8'	64°40.2		77	81		43.6	42.5
May 21	1200	42°11.2'			79	83	32.69	47.5	46.3
May 21	1300	42° 021	64°41.8'		80	84	20 51	48.8	48.0
May 21	1400	41°59.7'			83 84	86 88	32, 51	49.2	48.8
May 21	1500	41°59.8' 41°59.9'	65°05.9' 65°19.8'		86	90	31,77	44.3	41.8
May 21 May 21	1600 1700	41°59.1'	65°32.8'		88	92	31.77	47.7	47.6
May 21	1100	41 00.1	00 02.0		loading 4	loading 4		11.1	11.0
May 21	1805	41°58.4'	65°45,61	8	1	1	32.15	48.4	48.7
May 21	2000	41°58.3	66°02.5'		3	3	32.51	45.0	44.2
May 21	2100	41°59.2'	66° 18'		4	5		44.0	43.1
May 21	2200	42°01.1	66° 31†		6	6	32.84	44.6	44.4
May 21	2300	42°03.6			8	9		44.8	44.7
May 21	2400	42° 041	67°00.21		9	11	32.91	45.1	45.1
May 22	0100	42°02.81			11	12		46.1	46.1
May 22	0200	42°01.6'			12	14	32, 93	46.3	46.3
May 22	0310	41°57.8'	67° 42'		14	16	32.54	46.1	46.0
May 22 May 22	$0400 \\ 0500$	41°59.7' 42°02.3'	67°52.5¹ 68°03.6¹		16 17	18 19	32.34	49.2	47.6
May 22	0600	42°04.81	68°14,6'		18	21	32.48	47.9	46.9
May 22	0700	42° 091	68°28,3'		20	23		48.5	48.3
May 22	0800	42°12.4'	68°42.6'		21	25	32.58	48.5	47.3
May 22	0900	42°15.7'			23	27		48.5	47.3
May 22	1000	42°19.1'	69° 10'		25	29	32.47	48.7	47.9
May 22	1100	42°22.91	69°25.21		26	31		49.2	48.6
May 22	1200	42°24.7'	69° 37'	9	29	32	32.14	46.5	45.6
May 22	1400	42° 281	69° 591		31	43		49.9	48.1
May 22	1500	42°30.2'	70°12.4'		33	45	30.89	51.1	43.8
May 22	1600	42°32.3'	70°25.2'		35	47	20 20	52.7	51.5
May 22	1700	42°28.81 42° 221	70°25.6' 70°16.5'		37 39	49 51	28.30	52.8 51.9	50.7 48.2
May 22	1800	42° 22' 42°14.5'	70°16.5'		40	53	30.94	50.5	48.8
May 22 May 22	1900 2000	42°05.8'			42	55	30.34	51.6	47.8
May 22	2100	41°58.1'	69°46.2'		44	57	31.16	49.7	48.2
May 22	2200	41°51.6'	69°34.8'		46	59		49.6	46.7
						61	32.00	50.1	48.7
May 22	2300	41°50.31	69°21.2'		48	01	32.00	00.1	40.1

Table 5. -- Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze section Albatross III cruise no. 61, May 16-28, 1955-- Continued

		Lat-	Longi-		Sunface	10	Surf	ace	10-
Date	Time	itude	tude	l-meter	Surface gauze	10-meter gauze		Tem-	meter
		N.	w.	tow	section	section	Salin-	pera-	tem-
					Jeeu.on	Section	ity	ture	ture
Mor. 22	0200	41°48.31	68°48.1'		59	60	32. 38	°F.	°F.
May 23 May 23	0300	41°47.7'	68°32.5'		61	68 70	32.30	49.4 48.1	46.1
May 23	0400	41°46.8'	68° 17'		63	72	32,76	47.5	45.7
May 23	0500	41°45.6'	68°04.4'		65	75	32.10	46.8	46.7
May 23	0600	41*40.81	68°17.3°		67	77	32.72	47.3	46.8
May 23	07 00	41°38.81	68°29.8'		69	78		49.0	44.3
May 23	0800	41°37.3'	68°41.81		70	80	32.32	48.8	48.1
May 23	0900	41°36.71	68°55.11		72	82		47.7	47.1
May 23	1000	41°36.1'	69°09.21		74	84	32.09	48.3	47.2
May 23	1100	41°34.8'	69°21.8'		76	86		49.8	48.9
May 23	1200	41°30.8'	69°30.71		77	87	31.88	44.7	44.4
May 23	1400	41°20.8'	69° 24'		79	89		44.0	43.4
May 23	1500	41°17.9'	69°11.8'		81	92	- -	49.6	49.2
May 23	1600	41°18.4'	68°56.4'		83	94		50.0	49.5
May 23	1700	41°20.2'	68°42.1'		84	96	32.38	49.3	48.9
May 23	1800	41*22.71	68°28.41	11	86	97		45.7	44.9
1/ 00	2000	41004 51	000144	ļ	loading 5	loading 5	00.04	45 0	45.0
May 23	2000	41°24.5'	68*14.41		2	2	32.84	47.3	47.2
May 23	2100	41° 27'	68° 021		4	4		48.3	48.3
May 23 May 23	2200	41°30' 41°32.4'	67° 49' 67° 34'		6 8	6 8	32.94	47.9 47.6	47.7
May 23	2400	41°33.4'	67°20.7'		9	10	32 02	47.2	47.1
May 24	0100	41°33.1'	67°04.2'		12	12	32.92	46.8	46.8
May 24 May 24	0200	41°32.8'	66 48.1		14	15	32,80	45.3	45.3
May 24	0300	41°32.1'	66°34.8'		15	16	32.00	45.2	45.0
May 24	0500	41°30.3'	66°18.3'		18	19	32.80	44.7	44.2
May 24	0600	41°27.4'	66°03.2'		20	21		44.6	44.5
May 24	0700	41°22 8'	65°53.71		22	23	31,93	44.5	44.4
May 24	0800	41° 15'	66° 00'		24	25		46.5	46.2
May 24	0900	41°07.31	66°07.1'		25	26	35.44	66.9	67.1
May 24	1000	41°01.5'	66°14.7'		27	28		64.8	64.9
May 24	1100	41°01.2'	66°25.51		28	30	33.05	53.8	59.4
May 24	1200	41°02.2'	66°38.51	12	31	31		48.2	47.4
May 24	1400	41°03.7'	66°57.81		33	37	32.64	47.9	47.9
May 24	1500	41°02.8'	67° 10'		35	39		48.1	47.7
May 24	1605	41°01.2'	67°22.8'		37	41	32.69	46.5	46.4
May 24	1700	40°59.7'	67°33.4'		38	42		45.4	45.0
May 24	1800	40° 58'	67°47.21		40	44	32.66	46.6	46.4
May 24	1900	40°56.81	67°59.81		42	46	00.50	46.7	46.7
May 24	2000	40°57.6'	68°14.8'		44	48	32, 56	46.1	45.9
May 24	2100 2300	40°58.9' 40°59.8'	68°56.21		48	51	20 67	46.6	46.6
May 24 May 25	0005	41°01.3'	69°09.31		50 52	53 56	32.67	45.5 44.8	45.4 44.9
May 25	0105	40°52.9'	69°07'		54	57	32.23	45.2	44.9
May 25	0200	40°45.21	69°05.21		55	59		44.8	44.8
May 25	0300	40°36.21	69°04.21		57	60	32.15	46.5	46.0
May 25	0400	40°29.2'	68° 581		58	62		49.3	48.8
May 25	0505	40°27.5'	68°43.61		60	64	32.39	48.8	46.3
May 25	0605	40°27.7'	68°29.81	13	62	67		48.6	48.5
	1	1		1	5				

Table 5, --Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze section Albatross III cruise no. 61, May 16-28, 1955--Continued

							Surfa	ce	10-
5 .		Lati-	Longi-	l-meter	Surface	10-meter		_	meter
Date	Time	tude N.	tude	tow	gauze	gauze	Salin-	Tem-	tem-
		14.	w.		section	section	ity	pera- ture	pera- ture
								ture	ture
						ł	%0	°F.	°F.
May 25	0800	40°27.51	68°10.8'		67	69	32.53	48.3	48.3
May 25 May 25	0900 1000	40°28.4' 40°29.8'	67°58.1'		69 71	71	32.70	48.9 48.9	46.8
May 25	1100	40°30.5°	67°30.8		72	75	32.10	55.3	46.3 56.6
May 25	1200	40°31.3'	67°17.7		75	77	33.99	56.4	55.9
May 25	1300	40°31.31	67°02.6		77	79		57.5	63.5
May 25	1400	40° 311	66°48.6		79	81	35.47	64.7	64.5
May 25	1500	40°31.2'	66° 351		80	83		59.7	60.2
May 25	1605	40°26.4'	66°36.2		82	85	34.23	59.1	58.0
May 25	1700	40°19.8'	66°43.4		84	87		64.7	64.6
May 25	1800	40°11.9'	66°51.9		85	89	35.43	65.3	65.2
May 25	1900	40°04.3¹	66°58.8		87	90	25 25	64.9	64.6
May 25 May 25	2000 2100	39° 57' 39°50.4'	67°07.3°		89 91	92 94	35.35	64.9	64.5
May 25	2200	39°58.7'	67° 22'		93	96	35.55	65.8 57.4	65.4
May 25	2300	40°08.31	67°28.9		95	98	33. 12	54.5	54.1
1.12) 20	2000	10 00.0	0. 20.0		loading 6		00.12	04.0	34.1
May 26	0010	40°17.9'	67°35.8	14	1			52.2	52.4
May 26	0200	40°30.5'	67°41.1		3		33.11	53.0	52.0
May 26	0310	40°40.3	67° 47'		5			48.9	48.5
May 26	0400	40°48.8	67°51.5		7		32.69	46.9	46.0
May 26	0500	40°56.7'	67° 56'		8			45.9	45.8
May 26	0600	40°50.61	68°01.7'		10		32.67	44.4	44.3
May 26	0705	40° 39' 40°27.7'	68°05.1'		12		00.75	49.3	49.1
May 26 May 26	0800	40°18.4'	68°08.4'		14 16		32.75	49.9 49.7	50.0 50.7
May 26	1000	40 07	68° 181		18		32, 52	51.3	51.4
May 26	1100	39*57.61	68° 23'		20			53.4	53.0
May 26	1200	39°48.2'	68°27.3'	- -	21		33, 21	56.1	55.7
May 26	1300	39 52.71	68° 32'		23			58.5	56.4
May 26	1400	40 02.3	68°35.81		25		32.41	52,5	53.3
May 26	1500	40°11.5'	68°40.5		26			51.1	48.4
May 26	1610	40° 24'	68°46.7		28		32.40	50.1	45.5
May 26	1900	40°36.4'	68*51.1		33			46.7	43.6
May 26	2000 2100	40°45.4' 40°54.7'	68°55.5		35		32.61	45.3	45.1
May 26 May 26	2200	40°50.9'	69°00.31		37 38		32.45	45.2 45.6	45.2 45.4
May 26	2300	40 40.5	69°08.81		40		32.43	45.7	45.4
May 26	2400	40°30.3'	69°12.6'		42		32.35	47.0	46.3
May 27	0100	40°20.5'	69° 16'		44	!		50.7	50.7
May 27	0200	40°10.3'	69°20,21		45		32.27	51.6	51.5
May 27	0300	40 00.91	69° 251		47			51.2	47.9
May 27	0405	39 49.3	69°29.2		50		32.55	52.4	52.0
May 27	0500	39*49.5	69°32.51		51			52.2	51.8
May 27	0600	39°58.5'	69°38.81		53		32.11	52.1	52.5
May 27	0700	40°08.4'	69°45.2		55			52.7	52.1
May 27 May 27	0800 0900	40°18.5° 40°28.9°	69°51.7'	~-	57		32.32	52.3	52.7
May 27	1000	40°28.9°	70°02.8		59 61		32.41	51.5	51.6
May 27	1100	40°36.2'	70°09.9		63	1	34.41	49.3 50.3	48.9 50.2
May 27	1200		70°14.8'		64		32.58	52.4	52.2
- 1					01	' '	02.00	02.4	, 02.2

Table 5.--Date, time, and position for temperature and salinity records in relation to 1-meter tows and Hardy Plankton Recorder gauze sections Albatross III cruise no. 61, May 16-28, 1955--Continued

					0 6	1.0	Surf	ace	10-
Date	Time	Lat- itude N.	Longi- tude W.	l-meter tow	Surface gauze section	10-meter gauze section	Salin- ity	Tem- pera- ture	meter tem- pera- ture
						loading 6	%	$^{\circ}\!F$.	°F.
N/n 97	1500	40°11.7'	70°22.2'		68	3	.00	52.9	51.4
May 27 May 27	1600	40° 02'	70° 27'		70	5	32.90	57.1	54.9
May 27	1700	39°51.2'			73	8	32.30	58.0	57.7
May 27	1805	39°57.91			75	10	32, 43	53.9	53.1
May 27	1900	40°05.71			77	12		52.8	52.7
May 27	2000	40°14.8'			78	14	32.36	52.8	52.4
May 27	2100	40°23.8'			81	16		52.4	52.3
May 27	2200	40°32.7'			83	17	32.50	52.8	52.8
May 27	2300	40°40.71			85	20		54.8	50.9
					loading 7	loading 7	! {		
May 27	2400	40°32.31	71°24.31	17	1	25	32.48	53.5	53.1
May 28	0200	40°22.5'	71°36.5'		3	28		55.9	56.0
May 28	0300	40°15,31	71° 45'		5	30	31.61	55.0	54.0
May 28	0400	40°07.51	71° 53'		7	31		54.6	54.6
May 28	0505	40°09.1'	71°56.8'		9	34	31.45	54.6	54.5
May 28	0600	40°18.8'	71°56.5'		11	36		56.1	56.0
May 28	07 00	40°28.1'	71°56.8'		13	38	31.15	55.8	55.8
May 28	0800	40°37.8'	71°57.3'		15	39		56.0	52.6
May 28	0900	40°49.21	71°58.4'		17	42	32.09	55.2	53.8
May 28	1000	40°55,21	71°47.3'		19	44		55.3	55.0
May 28	1100	41° 01'	71°36.2'		21	46	32.00	55.6	54.5
May 28	1200	41°07.2'			23	48		55.5	53.3
May 28	1300	41°13.1'			25	50	32, 26	56.2	53.2
May 28	1400	41°17.4'	71° 00'	18	27	52		53.9	53.5

Table 6.--Stages and sizes of fish eggs and larvae taken with 1-meter net on Albatross III cruise no. 57, February 21 to March 2, 1955

	Tow			Number	Modal	Number	Average	
No.	Date	Time	Species	of eggs	stage	of larvae	diameter or length	Range
1	Feb. 22	0630	-	_	-	_	mm. -	mm. -
2	Feb. 22	1830	H-C A *H *C *A	6 2	V V - -	- 6 2 14	1.53 2.20 4.05 4.10 5.14	1.50-1.58 2.16-2.24 3.74-4.31 3.83-4.36 4.80-5.80
3	Feb. 23	0430	H-C *H *C	166 - -	v - -	90 44	1.54 4.08 4.49	1.41-1.72 3.43-4.53 3.92-5.06
4	Feb. 23	0645	*H	-	-	1	Unmeasurable	-
5	Feb. 24	1630	*H *C *A	-	-	2 1 7	2.66 4.27 5.29	2.60 - 2.73 - 4.80 - 5.63
6	Feb. 25	0630		-	-	-	-	-
7	Feb. 25	0230	-	-	-	-	-	-
8	Feb. 26	1430	H-C A *H *C	91 1 -	_ _ IA A	81 5	1.52 2.42 4.01 4.54	1.14-1.67 - 3.43-4.62 3.96-4.93
9	Feb. 27	0630	H-C A *H *C	2 1 -	V - -	- - 2 2	1.34 2.77 4.22 3.58	1.10-1.58 - 4.00-4.44 3.43-3.74
10	Feb. 27	1830	H-C *H *C H P E WO		I	140 93 2 2 22 10	1.57 3.75 3.96 5.10 5.80 57.50 23.00	1.36-1.80 3.21-4.36 3.61-4.31 4.00-5.20 4.00-8.00 55.50-62.50
11	Feb. 28	0620	H-C A *H *C *A	66 12 - -	V V - -	88 10 13	1.55 2.36 4.10 4.52 5.22	1.41-1.72 2.11-2.55 3.52-4.84 4.18-5.10 4.14-5.68
12	Feb. 28	1830	 *H *A	- - -	- - -	- 6 1	- 4.30 5.24	- 3.87 - 4.53
13	Mar. 1	0630	_	-	_	-	-	-
14	Mar. 1	1830	-	-	-	-	-	-

^{*}Hatched aboard ship.

Table 7.--Stages and sizes of fish eggs and larvae taken with 1-meter net on $Albatross\ III$ cruise no. 58, March 19 to April 1, 1955

	Tow			Number	Modal	Number	Average	Danage .
No.	Date	Time	Species	of eggs	stage	of larvae	diameter or length	Range
1	Mar. 20	0035	H-C A G¹ *H *A G' C C C C A M C C C C A M C C C C A M C C C C	9 1 45 - - -	- - - - - - - - VI	- 26 7 7 3 1	nm 1.49 2.11 1.75 4.17 5.37 4.34 5.58 5.00 63.0 31.0	mm. 1.36-1.58 - 1.63-2.16 3.34-4.58 4.80-5.76 3.87-4.80 4.75-6.00
2	Mar. 20	1815	H-C A *H *C *A H P HE AM	31 4	V II - - - - -	- 47 21 4 1 12 14 12	1.41 2.21 4.20 4.59 5.17 4.20 19.0 34.6 25.2	1.28-1.54 2.11-2.24 3.52-4.75 3.96-5.28 4.71-5.54 16.0 -24.0 26.0 -44.0 13.0 -35.0
3	Mar. 21	0615	C *H *C *A	1 - -	VI - -	2 11 1	1.67 4.49 4.65 5.76	4.27-4.71 4.05-5.06
4	Mar. 21	1730	W RO P	- - -	- - -	2 1 31	20.0 21.0 21.4	13.0-28.0
5	Mar. 23	1330	*H *A W AM P	- - - -	- - - - -	6 1 2 1	4.15 5.28 23.5 21.0 18.5	3.74-4.66 - 22.0 -25.0
6	Mar. 24	1320	H_C A *A AM	16 3 -	I I - -	- - 7 1	1.50 2.32 5.18 29.0	1.41-1.63 2.20-2.42 4.84-5.76
7	Mar. 25	0030	*H HE E P	- - -	- - -	3 31 1 7	4.09 37.2 57.0 20.6	3.70-4.40 31.0 -47.0 - 15.0 -27.0
8	Mar. 25	1815	W HE AM	- - -	- - -	2 1 1	21.0 36.0 19.0	20.0 -22.0
9	Mar. 26	0635	AM	-	-	2	17.0	16.0 -18.0
10	Mar. 29	1915	H-C Y *H	76 1	V V -	- 146	1.45 0.88 3.96	1.32-1.58 - 3.34-4.66

See footnotes at end of table.

Table ~.--Stages and sizes of fish eggs and larvae taken with 1-meter net on Albatross III cruise no. 58, March 19 to April 1, 1955--Continued

	Tow		Species	Number	Modal	Number	Average diameter	Panas
No.	Date	Time	Species	eggs	stage	larvae	or length	Range
10 Cont.			*C *Y AM U	- - - -	- - -	24 5 1	mm. 4.32 2.55 25.0 12.0	mm. 3.65-4.62 2.51-2.60
11	Mar. 30	0640	*H *A	-	-	1 15	3.96 4.90	3.96-5.72
12	Mar. 30	1530	H-C *H *C *A R	56 - - - -	V - - -	36 42 2 1	1.44 3.89 4.18 5.28 8.5	1.32-1.58 3.17-4.40 3.39-4.80 5.06-5.50
13	Mar. 31	0250	H-C A Y *H *C *Y *A HE AM P	56 1 4 - - - - -	V III V	101 42 2 2 15 1	1.46 2.20 0.86 3.92 4.16 3.12 5.22 39.1 24.0 28.0	1.32-1.58 - 0.84-0.88 3.08-4.49 3.08-4.75 2.99-3.25 4.93-5.50 33.0 -45.0
14	Mar. 31	1500	H-C A *H *C *A *Y P AM HE C	308 42 - - - - - -	V	325 73 30 1 5 11	1.44 2.26 3.80 4.21 5.11 3.12 23.6 23.6 36.0 4.00	1.28-1.63 1.89-2.55 3.08-4.62 3.39-4.97 4.49-6.25 17.0 -31.0 12.0 -36.0
15	Apr. 1	1310	H-C Y *H *C *A *Y	5 8 - - -	II V - - -	- 6 7 1	1.29 0.87 4.03 4.13 4.27 2.70	1.28-1.32 0.79-0.92 3.78-4.27 3.96-4.71 2.38-2.99

 $^{^{1}\}mbox{Measured}$ after being taken from gelatinous mass.

^{*}Hatched aboard ship.

Table 8.--Stages and sizes of fish eggs and larvae taken with 1-meter net on $Albatross\ III$ cruise no. 60, April 19 to May 2, 1955

	Tow		Species	Number of	Modal	Number	Average	Range
No.	Date	Time	Species	eggs	stage	larvae	diameter or length	nange
1	Apr. 20	0630	CU *CU WH HE	2 -	III - -	- 6 2 1	in mm. 1.38 3.70 41.5 24.0	in mm. 1.36-1.41 3.26-4.44 40.0 -43.0
2	Apr. 20	1815	H - C * H	17	v -	- 31	1.46 4.11	1.32-1.67 3.52-4.62
3	Apr. 21	0615	P	-	-	6	20.7	12.0 -37.0
4	Apr. 21	2245	P W HE	- - -	- - -	12 19 125	27.8 26.4 37.5	22.0 -35.0 20.0 -40.0 29.0 -50.0
5	Apr. 22	1545	H-C A *H *A W HE AM P	6 3	III V - - - -	7 12 4 2 5	1.54 2.32 4.12 5.27 28.0 36.5 15.0 21.5	1.36-1.63 2.20-2.51 3.08-4.58 4.93-5.63 20.0 -48.0 35.0 -38.0 12.0 -16.0 20.0 -23.0
6	Apr. 23	0945	H-C A *H *C *A	110 7 - - -		- 41 16 6	1.47 2.20 4.11 4.43 5.28 27.0	1.28-1.58 1.50-2.46 3.17-4.97 3.30-5.02 4.66-5.98
7	Apr. 24	0030	*H *CU *RO HE AM	- - - -	- - - -	2 2 6 39 1	3.87 4.29 2.08 39.8 35.0	3.56-4.18 4.22-4.36 1.94-2.20 35.0 -45.0
8	Apr. 27	1605	H-C A Y *H *C *A W P	7 6 1 - - - -	V V - - - -	18 7 8 2 2	1.43 2.08 0.84 4.51 4.53 5.53 24.0 25.0 17.3	1.32-1.54 1.76-2.24 - - 3.83-4.93 4.09-5.10 5.19-5.90 23.0 -25.0 22.0 -28.0 16.0 -19.0
9	Apr. 28	1235	H-C CU *H *CU	13 13 - -	V V -	- 15 7	1.47 1.34 3.94 4.00	1.36-1.58 1.23-1.41 3.61-4.31 3.61-4.36
10	Apr. 28	2335	*H	-	-	2	4.05	3.52-4.58
11	Apr. 29	1830	*Y *A P	- - -	-	7 1 1	2.62 4.40 18.0	2.29 - 3.04 - -

See footnote at end of table.

Table 2.--2 tages and sizes of fish eggs and larvae taken with 1-meter net on $Albatross\ III$ cruise no. 60, April 19 to May 2, 1955--Continued

	Tow		Species	Number of	Modal	Number	Average diameter	_
No.	Date	Time	Species	eggs	stage	of larvae	or length	Range
12	May 1	0755	H-C CU *H *CU P	3 9	V V - -	- 3 23 2	in mm. 1.38 1.32 3.46 3.89 21.0	in mm. 1.28-1.45 1.28-1.41 3.08-3.92 2.99-4.27 18.0 -24.0
13	May 2	0600	H-C A Y CU *H *C *A *Y H	50 2 3 1	V V V - - -	90 13 8 8 1	1.37 1.98 0.85 1.36 4.08 4.49 5.49 2.87 16.0 30.8	1.23-1.45 1.85-2.11 0.79-0.88 - 3.08-4.75 3.87-5.10 4.97-5.90 2.46-3.43 - 25.0 -40.0
14	May 2	2100	-	_	_	-		-
15	May 3	1015	H Y RO WE		- - -	1 3 1 2	3.65 2.66 1.98 2.97	2.51-2.82 2.86-3.08

^{*}Hatched aboard ship.

Table 9.--Stages and sizes of fish eggs and larvae taken with 1-meter net on Albatross III cruise no. 61, May 16-28, 1955

	Tow			Number	Modal	Number	Average	
No.	Date	Time	Species	of eggs	stage	of larvae	diameter or length	Range
1	May 17	0015	*WF A H WH	- - -	- - - -	5 3 3 2	in mm. 4.88 7.00 3.83 30.0	in mm. 4.57-5.41 7.00-7.00 3.50-4.00 28.0 -32.0
2	May 17	1830	*H *C *Y *RO P H	- - - - -	- - - - -	3 1 6 1 3 1	4.06 4.31 2.78 2.29 23.3 9.0	3.87-4.27 2.42-3.08 22.0 -24.0
3	May 18	1220	H-C CU RO WF *H *CU *WF *RO *XY	10 6 2 3 - - -	V V V 	22 12 12 12 6 1 24	1.39 1.29 0.84 1.32 4.09 4.18 4.74 2.06 2.42 12.2	1,36-1,45 1,23-1,36 0,84-0,84 1,32-1,32 3,65-4,40 3,87-4,62 4,36-5,15 1,89-2,16
4	May 19	0615	H-C CU *H *C *CU WH	1 3 - -	V V - - -	- 6 3 4	1.36 1.25 4.04 4.12 4.14 47.0	1.19-1.28 3.56-4.40 4.00-4.28 3.83-4.36
5	May 19	1830	P	_	_	1	19.0	-
6	May 20	1215	RO *RO	25	II -	- 4	0.82 1.82	0.79 - 0.88 1.76 - 1.94
7	May 21	0615	H-C *H CU RO	2 -	V	1 1 1	1.36 3.65 3.95 2.07	1.32-1.41
8	May 21.	1815	CU *CU AM	39 - -	V -	6 1	1.27 3.80 22.0	1.18-1.36 3.56-4.18
9	May 22	1210	-	-	-	-	-	-
10	May 23	0015	M *RO *M P WH SC H R AM SY	2	IV	- 4 1 5 1 1 2 50 1	1.30 2.04 3.78 31.4 40.0 15.0 5.00 6.50 21.8 12.0	1.28-1.32 1.80-2.29 - 28.0 -35.0 - - - 6.00-7.00 12.0 -43.0

See footnote at end of table.

Table 9.--Stages and sizes of fish eggs and larvae taken with 1-meter net on Albatross III cruise no. 61, May 16-28, 1955--Continued

	Tow		Cmanta-	Number	Modal	Number	Average	Penge
No.	Date	Time	Species	of eggs	stage	of larvae	diameter or length	Range
11	May 23	1820	H_C Y RO WF *H *CU *Y RO WF H WH P	1 4 2 1	III V IV III	- - 1 1 9 10 1 1 1 3	in mm. 1.41 0.89 0.82 1.19 4.18 4.14 2.88 1.96 4.97 22.0 36.0 20.0	in mm. 0.84-1.01 0.79-0.84 - 2.55-3.21 1.89-2.16 - 13.0 -25.0
12	May 24	1215	Y CU H-C *Y *CU	20 6 1 -	IV - V	- - - 69 11	0.85 1.24 1.32 2.71 3.93	0.79-0.88 1.19-1.28 - 2.11-3.12 3.52-4.40
13	May 25	1615	*WF *Y H A	- - -	- - -	10 1 4 3	4.61 2.99 9.62 19.3	4.05-5.15 - 7.00-16.0 17.0 -20.0
14	May 26	0020	SH *SH *WF R WH	47 - - -	v - - -	38 1 1 6	91.0 3.20 5.50 10.0 34.8	84.0 -97.0 2.73-3.52 - 30.0 -44.0
15	May 26	1630	WF Y *WF *Y *CU *RH	13 18 - - -	V	10 30 2 1	1.24 0.84 4.64 3.13 4.24 2.07	1.14-1.32 0.79-0.88 4.09-5.15 2.38-3.52 3.39-4.18
16	May 27	1215	WF RO RH *WF *RO *RH H	3 2 1 - -	V V V - -	- - 9 9 1	1.25 0.86 0.70 4.17 1.93 1.85	1.19-1.32 0.79-0.92 - 3.52-4.80 1.76-2.11
17	May 28	0015	*RO R H P Y RO E SH WH			1 1 2 66 3 1 57 22	1.76 9.5 25.0 25.5 7.63 17.7 53.0 11.4 39.3	25.0 -26.0 4.00-13.0 5.00-25.0 - 7.00-16.0 29.0 -55.0

See footnote at end of table.

Table 9.--Stages and sizes of fish eggs and larvae taken with 1-meter net on $Albatross\,III$ cruise no. 61, May 16-28, 1955--Continued

	Tow		C	Number	Modal	Number of	Average diameter	Person
No.	No. Date		Species	of eggs	stage	larvae	or length	Range
18	May 28	1410	M RH *M *RH H	32 6 -	V V - -	- 2 2 1	in mm. 1.11 0.84 2.70 2.09 11.0	in mm. 1.01-1.23 0.75-0.92 2.46-2.95 1.98-2.20

^{*}Hatched aboard ship.

Table 10.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on $4lhatross\ III$ cruise no. 57, February 21 to March 2, 1955

Surface

						Surface	Э					
Loading number	Gauze section	Species			mber of					Larva	ne	
ndiiber.	section		I	II	III	IV	V	VI	Species	Number	Length	Range
1	2-28 29-30 31 32-49 51 52	- - - H			- - - 1	-			LP	1 -	mm. - - -	mm. - - - -
	53-58 59 60 61 62 63 64 65 66-67 68 69 71		-			1	2 2 2 1 1	-	HE -	1	33	
2	72-98 1-21 23 24-26 27 28-34 35 36 37-43 45-63 64-96 97	- H - H H H		-		-	1	-	-	-	-	-
3	1-2 3 4 5 6 7 8 9 10 11 12 13 14 15-27	- и и и о и о и о и о и и и и и и и и и	1 2 1	1 2 2 1 1 1 1 1 1 1 1 1	3 1 3 2 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1				

Table 10.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 57, February 21 to March 2, 1955--Continued

	,	,			burrac							
Loading number	Gauze section	Species			er of					Larvae		
	20001011		I	II	III	IV	V	VI	Species	Number	Length	Range
3 Cont.	32-36 37 38-47 48 49 50 51 52 53 54 55 56 57 58 59-62 63 64-65 66 67 68 69	- С - нн - нн н сн нн - н нн н			111 - 1 1 4 7 7 - 5 1 1 1 - 2 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	71	Species	Rumber	mm	mm.
4	71 73 74 75 76-83 84 85 86 87 88 89 1-3 4 5-10 11 12-15 16 17 18 19 20-37 39-42 43 44 45	н н н н н н н н н н н н н н н н н н н			2		3		H		4.97	4.48-5.46

Table 10.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 57, February 21 to March 2, 1955--Continued

			,		Jun ac		0111404					
Loading number	Gauze section	Species			mber o					Larv	ae	
number	section		I	11	III	IV	V	VI	Species	Number	Length	Range
4 Cont.	46 47 48 49 50 51 52	H C H H H H			3 - 1 1 1 4 4 2	1 - 1 1 1 -	1 - 1 - 1		-	-	mm	mm. - - - -
	53 54 55 – 68	- H -	-	- - -	2 -	=	-	-		- -	-	- - -
					1	0 Mete	rs					
2 3	2-21 27-42 48-56 57 58 59 60 61-63 70-72 73 74 75-91	HHCCHHCCCHHCCCHHCCCCHCCCCHCCCCCCCCCCCC	ost on				1 - 1		-	-	-	-
3	1-2 3 4 5 6 7 8 9-17 21-29 30 31 32 35 36 37-42 43 44	- H H H H H H H H H H H H H H H H			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1		1		1	5.2	

Table 10.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 57, February 21 to March 2, 1955--Continued

10 Meters--Continued

Loading number	Gauze section	Species			mber o ndicat					Larv	ae	
Humber	80001011		I	II	III	IV	V	VΙ	Species	Number	Length	Range
3 Cont.	46 48 49–58 59 60 62–65 66 67–68 69 70 71 72–87	H H A - H - -	-	-	1 1	1	1	1	- - - - - - - - - - - - - - - - - - -	1 1 1 1 1	mm.	m m.
4	1-20	-	-	-	-	_	-	-	_	_	_	-

Surface

Loading	Gauze	Species			umber d					Larva	ie	
number	section	Diecies	I	II	III	IV	V	VI	Species	Number	Length	Range
1	1-24	_	_	_	_	_	_	_	_	_	mm.	mm.
	27-51	_ H	-	-	-	-	-	-	-	-	-	-
	52 53	-	-	-	_	-	-	_	_	_	_	-
	54 55	H -	_	-	_	-	1 ~	-	-	_	-	-
	57	-	-	-	-	-	-	-	HE	1	47	_
	58	H C	_	-	2	_	1	_	HE.	1 _	42	-
	59	H	-	-	-	-	1	-	-	_	-	-
	60	H	_	1	2	_	1	_	U -	1 -	_	-
	61	H	-	-	2	-	-	-	AM	1	42	-
	62	H C	_	-	6	-	2	_	_	_	-	-
	63	H C	-	-	3	1	1	-	-	-	-	-
	64	Н	_	1	3	-	2	-	_	-	-	_
	65	C H	-	-	2	1	1 -	-	_	_	-	-
	6 6	Н	-	1	3	-	-	-	-	-	-	-
	67 - 71 72	- н	_	_	2	_	_	_	-	_	-	-
	73 - 76 77 - 89	-	-	-	-	-	-	-	-	-	-	-
	90	-	-	_	-	-	-	-	W	1	26	-
	91-92	-	-	-	-	-	-	-	-	-	-	-
2	1-21	-	-	-	-	-	-	-	-	-	-	-
	22 23 - 25	H -	-	_	1 -	-	-	-	_	_	-	-
	26 27 - 29	Н	-	-	1	-	-	-	-	-	-	-
	35 - 37	-	-	-	_	-	_	-	-	-	-	-
	38 39 - 63	_	-	-	-	-	-	-	U _	1 -	25	-
	64	H	-	-	1	-	-	-	-	-	-	-
	65 66	H H	-	1	1	_	-	-	_	_	-	-
	67-72	-	-	-		-	-	-	-	-	-	-
	73 75	H	-	-	2	-	_	_	_	-	-	-
	76 77 - 87	Н	-	-	1	-	-	-	-	-	-	-
	88	-	-	_	_	-	-	_	HE	1	40	-
	89 90	Н _	-	-	1	-	-	-	-	-	-	-
	91	H	_	-	1	-	_	-	-	-	-	-
3	1-25	_	-	_	-	_	_	_	_	_	-	-
	26 27 – 28	H	-	-	1 -	-	-	-	-	-	-	-
	27-20	_			_	_		1				

Table 11.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 58, March 19 to April 1, 1955--Continued

Loading	Gauze	Species			mber of					Larva	ıe	
number	section		I	II	III	IA	Λ	ΛΙ	Species	Number	Length	Range
3 Cont.	29 30 - 31	Н	-	-	_	-	1	-	-	-	mm. -	mm. -
cont.	32 33	H H	-	<u>-</u>	-	1	1 -	-	- -	-	-	- -
	34 35 36	Н - Н	-	-	-	- -	1 - 1	- 1	- - -	- - -	-	-
	37 - 38 39	- н	-	-	2	- 2	-	-	-	-	-	-
	40 41 42	H H	-	=	- 2	1	-	=	- - -	- - -	- -	- - -
	43 – 45 49 – 51	- -	-	-	-	-	-	-	-	-	-	_
	52 53 54	H H	-	- -	- 1	1 2	- 1	-	P - -	1 -	14	- - -
	55 56	H H	-	-	1	- 1	-	1	-	-	_	-
	57 58 59	H H H	-	-	1	1 -	1 -	-	- - -	- - -	=	- -
	60 65	H H	1 -	-	1	_	1 -	-	- - -	- - -	- - -	-
	66 - 71 72 73 - 83	— Н	-	-	1 -	- -	- - -	-	- -	- -	- -	-
	84 85	H H H	- -	1 2	1 1 1	=	- -	-	- - -	- - -	- - -	- -
	86 87 88	H H	-	-	2 4	-	-	-	·- -	-	-	- -
	89 90 91	H H H	-	2 1 -	1 2	2 -	- 1	- - -		- - -	- - -	- - -
4	1 2	_ Н	-	-	_ 1	-	-	-	<u>-</u>	-	_	-
	3 - 4 5 6	— Н Н	- -	-	1 1	- - 1	- - 1	-	- HE	- - 2	- - 32	- 30-35
	7 8	H H	-	- -	2	2 -	1 -	<u>-</u>	-	-	- -	-
	9 - 11 12 13	- Н Н	- -		1 2	- - -		- - -	- - -	- -	- - -	- - -
	14 15	H H	-	-	1	-	-	-	- -	_	- -	-
	16 - 22 23 24	H H	- -	- - -	2 2	- - -	-	-	- - -	- - -	- -	- - -
	25-29	-	-	-	-	-	-	-	-	-	-	-

Table 11.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 54, March 19 to April 1, 1955--Continued

Leading	Gauze	Species			ter of					Larv	ae	
number	section	Species	I	II	III	IA	V	VI	Species	Number	Length	Range
4 Jont.	30 31	H	-	1	-	 - -	-	-	_	-	mm. -	mm. -
	32 33 34	Н Н	-	- - -	3	2	=	-	-	- -	- - -	- - -
	35 36	H H	-	-	3	1 -	-	-	-	- -	-	-
	38	C H C	-	-	3 -	1 2 2	-	-	-	-	- - -	- - -
	39 40	H H C	- -	-	3 2 -	- - 1	1 1	-	H -	1 - -	4.5 -	- - -
	41	H 2	- -	-	3	3	1 1 3	1 - 2	H -	1 - -	3.7 -	- - -
		C H	-	- - 1	2	1	2 4	4	- c	- 1	- 3.7	-
	44	C H C	-	-	1 2	3	2 3 5	-	U -	1 - -	6.0 - -	- - -
	45 46	H C H	-	- - -	- 1	- 1	2 1 -	-	HE	- - 1	- - 43	- - -
	47	H	-	-	1 2	2	1 1	- - 2	HE HE	1 - 1	40 - 38	- - -
	49	C H	-	-	1 2	1 2	-	-	HE	- 1	- 40	-
	50	C H C	- - -	- - -	3	- - -	2 -	-	U -	1 -	-	- - -
	51 52	H C	- -	1 -	1 -	2	1 -	-	-	-	-	- - -
	53 54	H C H	-	-	2 1 3	- - -	- - 1	-	- H	- - 1	- - 40	- - -
	55	C H	-	-	- 1	- 1	1 -	-	-	- -	-	-
	56 57 - 64	С Н -	-	-	1 -	- - -	1 - -	-	U -	1 -	23	-
	65 66	H C H	-	- 1	- - -	- -	1 1 -	-	-	- - -	-	- - -
	67	C H C	-	-	- 1 1	- - -	1	=	-	- -	- -	- -
	68	H C		- - -	- -	- 1	1 -	2 -	-	- -	-	-
	69	H C	-	-	-	-	3	1 -		-	-	-

Table 11.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no 58, March 19 to April 1, 1955--Continued

Loading	Gauze	Species			nber of ndicate					Larve	le	
number	section		I	II	III	IV	V	VI	Species	Number	Length	Range
4 Cont.	70 71	H C H C			1		1 1 3 1	1 - 4 1	- - - -	- - - -	mm. - - -	mm. - - -
5	1 2 3-7 8 9-15 16 17 18 19-20 21 22-23 24 25-26 27 28-34	 			1	-	1 1 1 - 1		AM	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14 - - 49 45 - - 4.18	
					10	Meter	`s		•			
1	1-22 25-38 39 40-46 47 48-50 61 62 63 64 65 66 67 68 69-74 75 76-80 81-82 83 84 85-95	- - - - - - - - - - - - - - - - - - -			1 1 2 1 5 1 1 1 1	1	1		C AM C U H WO RE	1 1 - 1 1 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- 8 - 16 8 8	16-18
2 .	1-19 20 21 22-27 28	н н - н		1 - 1	1	-	-	- - -	- - - U	- - 1	- - - 9	- - - -

Table 11.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on $Albatross\ III$ cruise no. 58, March 19 to April 1, 1955--Continued

10 Meters--Continued

Loading number	Gauze section	Species			mber of	eggs d stag				Larva	ie	
number.	56001011		I	II	III	IV	V	VI	Species	Number	Length	Range
2	29-30										mm.	mm.
Cont.	29 - 30 34 - 40	<u>-</u>	_	_	_	_	_	_	-	_	_	-
00110.	41	H	_	1	_	_	_	_	_	-	_	_
	42 - 63	_	-	_	-	-	_	-	-	-	_	-
	64	H	- :	1	-	-	-	-	-		-	-
	65	Н	-	1	-	-	-	-	-	- 1	-	-
	66-72	-	-	-	-	-	-	-	-	- 1	-	-
	75 - 83 84	- н	-	1	1	-	_	_	_		-	_
	85 - 91	_ n		_	_	_	_	-	_			_
1	0,0-71	_	_	-	_	_	_	_	_	_	_	_
3	1-23	_	-	-	-	-	-	-	_	-	-	_
1	25	H	-	-	1	-	-	-	-	-	-	-
	26	Н	-	-	1	-	-	-	-	-	-	-
	27-28	-	-	-	-	-	-	-	-	-	-	-
	29 30 – 34	H -	-	1	-	-	-	_	-	-	- 1	_
	35	<u>-</u> н	-	-	1	_	-	_	-	-	_	_
	36	H	_	_	ī	_	_	_	_	_	_	_
ĺ	37-38	-	_	-	_	-	-	-	-	-	-	_
i	39	H	- 1	-	1	-	-	-	-	-	-	-
	40	H	-	-	1	-	-	-	i -	-	-	-
	41-45	-	-	-	-	-	-	-	-	-	-	-
	48 - 51	- Н	-	-	1	-	-	-	-	-	-	-
ĺ	52 53	H H	-	-	_	-	-	- 1	_	_	-	_
1	54	n H	-	-	_	_	_	1	_	-	_	_
ì	55	H	1	_	_	-	_	_	HE	1	36	-
	56	H	-	1	2	-	_	_	Н	1	5.5	-
		-	-	-	-	-	_	-	С	1	10	-
İ	57-58	-	- 1	-	-	-	-	-	-	-	-	-
	62-80	-	-	-	-	-	-	-	-	-	-	-
	81	Н	-	-	1	-	-	-	-	-	-	-
i	82	-	- 1	-	-	-	-	-	H	1 1	9	-

Table 12.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 60, April 19 to May 2, 1955

Surface

Loading	Gauze					f eggs ed stag				Larv	ae	
number	section	Species	I	II	III	IV	V	VI	Species	Number	Length	Range
1	1-2 3 4 5-6 7 8-9 10 11-28 32-49 51-56	- - - - H					- - - - 1		- H H - H	1 1 - 1	mm. 12 - 13 -	mm. ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
	51-96 57 58-61 62 63 64 65 66 67 68-70 71 72 73 74 75 76 77 78 79 80-81 82 83 84-91 92 93 94-96 97 98-100+			1 1 2 1 1 6 4	1 - 1 - 1 1 1 3 4 2 6 1 3 1 1 1	1 3 1			H C	1	9.1	8,5- 10,5
2	1-8 9 10-11 12 13-14 15 16 17 18 19	- - - - - - -		-					P P P P P P P	1 - 1 - 1 - 2 - 3	25 - 20 - 25 17 - 18	15-20 15-20

Table 12.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 60, April 19 to May 2, 1955--Continued

									T			
Loading	Gauze	Species			nber of					Larv	ae	
11000001	50001011		I	II	III	IV	V	VI	Species	Number	Length	Range
Loading number 2 Cont.	Gauze section 20 21 22 23 24-29 30-37 38 39 40 41 42-44 45 46-49 51-55 56 57 58 59 60 61 62 63 64 65			11	III	IV	V V		P U	Number	Length mm. 18 - 23	mm.
	66 67	С Н С Н С	1 -	2 4 - 1 1 5	2 5 7 2 5	3 2 5 2	1 - 1 - 1	- - - -	- - - -	-	-	
	68 69 70 71 72 73 74 75-76 77	H C H C H H - - - H H H		1 2 1 1 2 1 2 1 2 1	5 2 2 - 1 1 - 1 5 2	1 2 - 1 1 2 2	-		- - - - - - - - - - - - - - - - - - -	1		-

Table 12.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 60, April 19 to May 2, 1955--Continued

	,		,		Dura		nemue					
Loading number	Gauze section	Species			ber of dicate					Larva	ie	
number	Section		I	II	III	IV	V	VI	Species	Number	Length	Range
2 Cont.	80 81 - 86 87	H - CU	1 -	- - -	- - 1		-		- - -	- - -	mm. -	mm. -
3	1-13 14 15 16-24 29 30 31-36 37 38 39 40-56 57 58-61 62 63 64 65 66 67 69 70 71 72 73 74 75 76 77 78-81 82 83 84 85 86 87	RO					1 2 3 3 - 2 2 1 1		AM C C		15	
4	1-2 3 4-10 11 12	- Y -	-	-	- - - -	-	1	- - - -	н - - н	1	4.0	-

Table 12.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 60, April 19 to May 2, 1955--Continued

					oura		Torride	.				
Loading number	Gauze section	Species			mber of					Larva	ae	
number	Sec 01011		I	II	III	IA	V	ΛI	Species	Number	Length	Range
											mm.	mm,
4	13	Y	_	_	1	_	-	_	-	-	_	_
Cont.		H	_	_	-	_	1	-	-	-	_	_
	14	Y	-	-	-	-	-	1	-	-	-	-
	15	H	-	1	-	-	-	-	-	-	-	-
	16	-	-	-	-	-	-	-			-	-
	17 18	- Y	_	_	-	-	1	<u>-</u>	AM -	1 -	25	_
	19	H	-	_	_	1	-	-	_	-	_	_
	20	H H	-	ī	_	î	_	-	_	-	_	_
	22-43	_	_	_	-	_	-	-	-	-	-	_
	44	H	-	-	-	1	-	-	_	-	-	-
	45	-	-	-	-	-	-	-	-	-	-	-
	46	Н	-	-	-	-	1	-	-	-	-	-
	47 48	- н	-	1	_	-	-	-	-	-	-	-
	40	H	-	_	1	_	1	_	-	_	_	<u> </u>
	50-51	11	[_	_	_	_	_	_	-	-	_
	52	Н	_	-	1	-	-	-	1 _	_	_	_
	53	_	_	-	-	-	-	-	_	-	-	-
	54	Н	-	-	1	-	-	-	-	-	-	-
	55	Н	1	-	1	-	-	-	-	-	-	-
	56	Н	-	1	1	-	-	-	-	-	-	-
	57	H H	-	1	=	-	-	_	_	_	-	_
	58	CU	_	1	-	-	-	-	_	-	-	_
	59	H	1	4	3	_	-	_	_	_	_	_
		C	_	1	_	-	-	_	_	_	_	_
	60	Н	1	4	2	1	-	-	-	-	-	-
		C	-	1	-	-	-	-	-	-	-	-
	61	H	1	6	1	1	-	-	-	-	-	-
		C	-	5	1	1	-	-	-	-	-	-
	62	H C	-	2	1 -	-	-	-	-	_	-	-
	63	H	_	3	ī	-	-	_	_	[-	_
	05	c	_	ĺ	_	-	_	_	l -	-	_	_
	64	Н	_	_	1	-	-	-	-	-	-	-
	65	Н	-	_	1	-	-	-	-	-	-	-
	66	Н	-	-	1	1	-	-	-	i -	-	-
	67	H	-	-	2	-	-	-	-	-	-	-
	68 69	H H	-	-	2 2	1	-	<u> </u>	_	-	-	-
	69	C	_	_	-	i	_	_	_	_	_	_
	70	H	_	1	5	ī	_	_	-	-	-	_
	, ,	C	l	_	2	1	-	-	-	-	-	-
		CU	-	-	2	-	-	-	-	-	-	-
	71	Н	-	2	3	-	-	-	-	-	-	-
		CU	-	-	1 2	1	_	<u>-</u>	-	-	-	-
	72	CU H	<u>-</u>	-	1	-	_	_	-	_	_	-
	12	CU	-	1	-	_	_	_	_		_	_
	73	H	-	_	2	-	_	_	_	_	_	_
	74-78	-	- 1	_	_	-		_	-	-	-	-
	79	Н	-	_	-	1	- 1	_	-	-	-	-
		•										

Table 12.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 60, April 19 to May 2, 1955--Continued

Loading number	Gauze section	Species		Nu	mber o	f eggs ed sta	in ge			Lar	vae	
Humber	Bec troil		I	II	III	IV	V	ΛΙ	Species	Number	Length	Range
4											mm.	mm.
Cont.	80	Y	- 1	i -	1	-	-	-	i -	-		-
	81	Н	-	-	-	1	-	-	_	-	-	-
1		CU	-	-	-	1	-	-	-	-	-	-
i	82-84	-	-	-	-	-	-	_	-	-	-	-
	85	-	-	-	-	-	-	-	Н	1	4.2	-
	86	H	-	-	-	1	1	-	-	-	-	-
1	87	Н	-	-	-	-	3	-	-	-	-	-
- 1	88	Н	-	-	1	1	-	-	-		-	-
	89	H	-	1	-	-	-	1	-	-	-	-
5	1	_	_	- 1	_	_	_	-	Н	1	13	_
	2	Н	-	-	-	_	1	-	Н	1	13	-
	3	Y	-	-	-	1.	-	i –	-	-	-	-
	4	H	- 1	-	-	-	1	_	-	-	-	-
	5	H	-	-	-	-	2	-	-	-	- 1	-
		Y	-	1	-	_	-	-	-	_	- i	-
Ì	6	-	- 1	-	-	-	-	-	-	-	-	-
	7	Y	- 1	_	-	_	1	-	_	_	-	-
	8	-	- 1	-	-	-	-	-	-	_	- 1	-
	9 .	Н	-	-	-	1	-	_	_	-	-	-
	10-14	_	-	-	_	-	-	-	-	-	-	-
	15	CU	-	-	1	-	-	-	_		-	-
	16-21	-	-	-	-	-	_	-	-	-	-	_
	22	CU	_	-	1	-	-	_	_	- 1	- 1	-
	23-24	-	-	-	-	-	-	-	-	- 1	-	-
	25-28	-	-	-	- :	-	-	-	- :	- 1	-	-
1	29	Y	-	1	-	-	-	-	-	-	-	-
	30-31	- 1	-	-	-	-	-	-	-	- 1	- 1	-
	32	CU	-	1	-	_	-	-	-	- 1	-	-
	33	Н	-	_	-	_	_	1	- 1	-	-	-
	34	Н	-	-	-	2	_	-	-	-	-	-
	35	Н	-	-	2	-	_	-	-	-	-	-
	36	Н	-	-	-	1	1	-	-	-	-	-
	37	H	-		-	1	_	-	-	-	-	-
	38	- 1	-	-	-	-	-	-	-	-,	-	-
]	39	RO	-	1	- !	-	-	-	-	-	-	-
1	40-41	-	-	-	-	-	-	- 1	-	-	-	-
	42	Н	-	-	-	2	-	-	-		-	-
	43	-	-	-	-	-	-	-	H	1	13	-
	44-47	-	-	-	-	-	-	- i	- 1	-	-	-

Table 12.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 60, April 19 to May 2, 1955--Continued

10 Meters

Loading	Gauze	Species			mber of					Larve	10	
number	section		I	II	III	IA	V	VI	Species	Number	Length	Range
1	17 - 34 36 - 38 39 40 - 43 44		- - - -						- A - H	1 - 2	mm. - 7.5 - 6.5	mm. - - - - 6.5-
	45 46 47 48	- - - -	-	-		-		-	C U H A H	2 1 2 1 2	8.5 9.0 7.5 7.5 6.0	6.5 7-10 - - 5.6- 6.3
	49-58 60-61 62 63 64 65-90	- н н н	-	- 1	- 2 2 1	- - - - -		-	- - - - -	- - - -	- - - -	- - - -
2	1-28 30-35 36 37-59 60 61 62-66 67 68 69 70-76 77 78-87	- H C H C - H	1	5 - 5 - 1	1 14 - 1 1 - 1	1 1 1		-		-		
3	1-7 8 9-23 27 28-37 38-65 66 67 69 70 71-77 78 79-85 86					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3		AM AM H - - - - - -	1 - 1	31	

Table 12.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 60, April 19 to May 2, 1955--Continued

10 Meters--Continued

Loading	Gauze section	Species		Nu i	mber of ndicate	eggs d sta	in ge			Larv	аө	
TIGHIO DE	80001011		I	II	III	IV	V	VI	Species	Number	Length	Range
3 Cont.	87	_	-	_	_	-	_	_	-	-	m m.	mm. -
4	1-7 8 -	- - -	- -	-	-	- - -	- - -	- - -	- Н Ү	1 2	6.8 2.7	- 2.7- 2.7
	9-21 23-57 58-70 71 72-77 78 79-88 89 90 91	- - - - - - - - - - - - - - - - - - -	11111111111	-	1 1 1 1 2 1	1 1 1	1	-	AM C	1 1	39	
	93 - 94 95 96 97	- С Н Н	-	-		1	- 1 1	1 -	- - C H	- 1 2	8.4 4.9	- - - 4.5- 5.3
5		n led - No s	- umples	-	-	1	-	-	51	1	7.7	-

Table 13.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 61, May 16-28, 1955

Surface

						Surfa	ce					
Loading number	Gauze section	Species			mber of ndicate					Larv	/ae	
number	Sec 01011		I	II	III	IA	V	VI	Species	Number	Length	Range
1	1 2 3 4 5	M M RH RH RH	-	- - - 1	3 1 1 1 -	2 1 - 2 -			-	- - - -	mm. - - -	mm. - - -
	6 7-10 11 12 13 14 15-20 30-47 48 49-50	RH — MH — Y — — — —				1	5 7 - 1	-	- - - - - - - - - - - - - -			-
2	1 2-3 4 5-9 10 11 12 13 14 15 16 17 18 19 20 21-31 33 34 35 36-37 38 39-42 43 44 45 46 47-50 51 52-57 58 67 68 69 70-75 76							1 2	н 		30.0	

Table 13.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albahross HI cruise no. 61, May 16-28, 1955--Continued

_					Jai Lac	C0011	ollidea					
Loading number	Gauze section	Species			mber of					Larva	ne	
number	Section		I	II	III	IA	v	VI	Species	Number	Length	Range
2 Cont.	77 78 - 82	H -	-	- -	-	1 -	- -	-	-	-	mm, -	mm. -
3	1-9 10 11-13 14 15 16 17 18 19-27 28 29-30 33-41 42 43-44 45 46-48 49 50-53 54 55-58 59 60 61 62 63 64 65 66 69-72 73 74 75-84 85 86 87 88-89	- H RO - CU RO CU CU RO CU - CU			2 2 1						15.00	
4	1-2 3 4 5 6-8 9 10 11 12	-		-			1111111	-	U U U W U U AM AM	1 1 1 1 2 1	3.0 - - 35 35 35 35	30-40 30-40 30-40 30-40 30-40

Table 13.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on $Albatross\ III$ cruise no. 61, May 16-28, 1955--Continued

					Suriac	:0 001	i o i i i dec	,				
Loading number	Gauze section	Species				f eggs				Larv	ae	
number.	Section		I	II	III	IV	v	ΛI	Species	Number	Length	Range
4 Cont.	14 15 16 17 18 19 20 21 22–27 29–31 32 33 34 35	- - - - - - - - - - - - - - - - - - -	I				V 1 5	VI	Species U AM AM AM - AM - - - - - - - - - - - - -	Number	mm	mm.
5	37 38 39 40 41 42 43 44 45 46–49 57–61 62 63 64 65–73 74 75 76 77 78–79 80 81–83 84 85–86 1–2	WF RO M RO H RO F RO M RO F F H Y F H Y H F F H Y F F H Y F F F H Y F F F F					21		RO RO AM AM		2.1	
	3 4 5-6 7 8-13 14	- - - - -	-	-		-	- - - -	-	Н Н — Н —	1 1 - 1	13 - - - 15	-

Table 13.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 61, May 16-28, 1955--Continued

Loading	Gauze	Species			ber of dicate					Lar	vae	
number	section		I	II	III	IV	v	ΛI	Species	Number	Length	Range
5 Cont.	15-16 17 18-21 22 23-24 25 26 27-29 31-33 34 35 36 37-46 47 48-52 53 54-58 59 60-61 62 65 66	CU	1	11	III	1V	V - 1	VI	R A - C CU	Number	Length mm.	mm.
	66 67 68 69 70 71 72 73 74 75–81 82 83–85 86 87–89 90 91–96	SH SH SH SH SH SH SH RH SH - RH	1	1	1 2 - 1	122-14212	3 - 2 9 6 5 - 1		- - - - - - - - - - - - - - - - - -		11	
6	1 2 3 4 5-7 8 9 10 11 12-22 23 24-28	SH SH RH SH WF RH - Y	1	1	1	3 - 2 - 1 - 1 - 1 - 1	2 1	-	SH SH - SH - U - -	1 2 - 1		

Table 13.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 61, May 16-28, 1955--Continued

					nber of					Larv	700	
Loading	Gauze	Species		ir	ndicate	ed stap	ge			Tat. v	ae	
number	section	Species	I	II	III	IV	V	VI	Species	Number	Length	Range
6 Cont.	31-41 42 43-56	- - - Y		-		- - -	- - -	-	RO -	1 -	mm. - 3.0	mm. - -
	57 58 59-63 64 66-73 74 75-80 81	RH - RH Y RO		1 1 - 1 1 1 1 1		1	-		-	-		
	82 83 - 86	_	-	-	<u>-</u>	-	-	-	SH -	1 -	4.5	-
7	1 2 3 4 4 5 6 6 7-8 9 10 11 12-13 14 15 16 17 18 19 20 21 22 23 24 25 26 27								Y Y Y Y Y RO		10.5 -9.0 10 7.5 11 -4.5 -4.0 -1 -1 -1 -1 -1 -1	

Table 13.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on $Albatross\ III$ cruise no. 61, May 16-28, 1955--Continued

10 Meters

oading	Gauze	Species				f eggs ed sta				Larv	a.e	
umber	section	•	I	II	III	IV	v	VI	Species	Number	Length	Rang
								l			mm.	mm.
1	1-3		-	-	-	-	-	-	_	-	-	-
	4	Y	-	-	-	1	-	-	-	-	-	-
	5 - 27 40 - 62	_	_	-	_	_	_	_	-	-	_	_
2	1-10	_	_	_	_	_	_	_	_	_	_	_
_	11	Н	-	_	_	1	_	-	_	_	_	_
	12-17	_	-	-	_	-	-	-	_	-	-	-
	18	Н	-	-	-	1	-	-	_	-	-	-
	19~21	-	-	-	-	-	-	-	-	-	-	-
	22	Н	-	-	1	-	_	-	-	-	-	-
	23 - 31 32		-	_	-	_	_	_	- c	1	- -	_
	33	H	-	_	_	_	3	1	_	_	6.1	1
	35	-	_	_	_	_	_		H	1	4.5	-
	36	_	_	_	_	_	_	_	-	_	7.	_
	37	_	_	_	_	-	_	_	н	1	4.0	-
	38-42	_	-	-	-	-	-	-	-	_	-	-
	43	-	-	-	-	-	-	-	С	1	7.5	-
	44	_	-	-	-	-	-	-	H	1	3.8	-
	45-48	-	-	-	-	-	-	-	-	-		-
	49	-	-	-	-	-	-	-	H	1	4.0	-
	50 - 52 5 3	-	-	_	-	-	-	-	Н -	ī	4.5	-
	54 - 57	-	-	_	_	_	-	_	_ n	_	4.5	<u>-</u>
	58	H		_	_	_	_	ı	[_	-	-
	59-63	-	_	_	_	_	_	-	l <u>-</u>	_	_	_
	64	H	_	-	-	-	1	_	_	-	-	_
	6 5	-	-	-	-	-	-	-	-	-	-	-
	67-71	-	-	-	-	-	-	-	-	-	-	-
	72	-	-	-	-	-	-	-	C	1	6.5	-
	73-87	-	-	-	-	-	-	-	-	-	-	-
3	1 - 16 17	- RO	-	-	-	-	-	-	-	-	-	-
	18		-	1 -	-	-	_	_	_	_	_	-
	19	н	_	_	_	ı	1 -		_	-	-	-
	20-33	_	_	_	-	-	-	-	_	_	_	_
	37-70	_	-	-	_	-	-	-	-	-	-	-
	72-93	-	-	-	-	-	-	-	-	-	-	-
4	1-32	-	-	-	-	-	4	-	-	_	_	-
	41-49	_	-	-	-	-	-	-	-	-	-	-
	50	RO	-	-	-	-	1	-	-	-	-	-
	51 52	RO	-	_	ī	_	_	_	_	-	-	- -
	53	- NO	_	_	_		_	-	[_	[-
	54	RO	_	_	_	ī	_	-	_	_	-	_
	55-61	-	_	-	-	_	_	_	_	_	-	-
	62	_	- 1	-	-	-	-	-	AM	1	7.5	-
	66-75	-	-	-	-	-	-	-	-	-	-	-
	76	Y	-	-	-	1	-	-	-	-	-	-
1	77-97	-	- 1	- 1	-	-	-	-	ı -		ı -	_

Table 13.--Stages and sizes of fish eggs and larvae taken with the Hardy Plankton Recorder on Albatross III cruise no. 61, May 16-28, 1955--Continued

10 Meters--Continued

Loading number	Gauze section	Speciea			nber of					Larv	8.6	
II dans of	50001011		I	II	III	IV	V	VI	Species	Number	Length	Range
5	1-10 11 12-17 18 19-31 35 36 37 38 39 40 41 42 43 44-50 51 52-61 62 63 64-65 67-70 71 72-74 75 76 77 78-83 84 85-94								U H Y WF WF WF WF U H SH SH U U U U H T SH T SH T U U U U U U U U U U U U U U U U U U	1 1 2 1 2 2 1 1 1 1 2 2 1 1 1 1 1 1 1 1	mm	mm
6 *	96-100 1-17 18 19 20 21	-		-	- - - -	-	-	-	- Y - Y	1 1	- - - 9.0	- - - -
7	25-26 27 28-29 30 31-32 33 34 35-40 41 42-43 44 45-50 51 52	- - - - - - - - - - - - - - - - - - -							U Y CU SH U U	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7.0 7.0 5.6 5.0 8.0 4.0	-

^{*}Tows 1 and 2 - No samples - Fusee wire broke.

Table 14.--Gauze section data on Hardy Plankton Recorders towed at surface and 10 meters,
Albatross III cruise no. 57, February 21 to March 2, 1955

Loading	Gauze se	ction	Number of sections	Distance	Section	Conversion
number	Start	Finish	exposed	travelled	equivalent	no./5 mi.
			Surface			
1	2 29 51 71	28 49 69 98	27 21 19 28	Miles 140.5 102.5 105.7 152.0	5.20 4.88 5.56 5.43	0.96 1.02 0.90 0.92
2	1	21	21	136.7	6.51	0.77
	23	43	21	128.0	6.10	0.82
	45	63	19	96.5	5.08	0.98
	64	97	34	186.0	5.47	0.91
3	1	27	27	161.3	5.97	0.84
	32	51	20	112.3	5.62	0.89
	52	71	20	111.0	5.55	0.90
	73	89	17	114.0	6.71	0.75
4	1	37	37	218.6	5.91	0.85
	39	68	30	178.7	5.96	0.84
			10 Meters			
1	2	21	20	140.5	7.03	0.71
	27	42	16	102.5	6.41	0.78
	48	63	16	105.7	6.61	0.76
	70	91	22	152.0	6.91	0.72
2*						
3	1	17	18	161.3	8.96	0.56
	21	32	12	112.3	9.36	0.53
	35	46	12	111.0	9.25	0.54
	48	60	13	114.0	8.77	0.57
4	62	87	26	218.6	8.41	0.59
	1	20	20	178.7	8.94	0.56

^{*}Recorder and complete records for 500 miles lost on Browns Bank, 2/26/55, 0230.

Table 15.--Gauze section data on Hardy Plankton Recorders towed at surface and 10 meters, $Albatross\ III$ cruise no. 58, March 19 to April 1, 1955

Loading	Gauze s	ection	Number of sections	Distance	Section	Conversion
number	Start	Finish	exposed	travelled	equivalent	no./5 mi.
			Surface			
1	1 27 57 77	24 55 76 92	24 29 20 16	Miles 154.0 166.7 114.3 82.1	6.42 5.75 5.72 5.13	0.78 0.87 0.87 0.97
2	1 35 75	29 73 91	29 39 17	172.4 235.5 100.0	5.94 6.04 5.88	0.84 0.83 0.85
3	1 26 49 65	25 45 60 91	25 20 12 27	136.4 121.0 68.1 155.5	5.46 6.05 5.68 5.76	0.92 0.83 0.88 0.87
4	1 38 52	36 51 71	36 14 20	191.9 84.8 116.2	5.33 6.06 5.81	0.94 0.83 0.86
5	1	34	34	194.8	5.73	0.87
			10 Meters			
1	1 25 61 81	22 50 80 95	22 26 20 15	154.0 166.7 114.3 82.1	7.00 6.41 5.72 5.47	0.71 0.78 0.87 0.91
2	1 34 75	30 72 91	30 39 17	172.4 235.5 100.0	5.75 6.04 5.88	0.87 0.83 0.85
3	1 25 48 62	23 45 58 83	23 21 11 22	136.4 121.0 68.1 155.5	5.93 5.76 6.19 7.07	0.84 0.87 0.81 0.71
4*						

^{*}Recorder and complete records for 500 miles lost on 3/30/55, 0840.

Table 16.--Gauze section data on Hardy Plankton Recorders towed at surface and 10 meters, $\it Albatross~III$ cruise no. 60, April 19 to May 2, 1955

Loading	Gauze s	ection	Number of sections	Distance	Section	Conversion factor for
number	Start	Finish	exposed	travelled	equivalent	no./5 mi.
			Surface			
1	1 32 51 73	28 49 71 100	28 18 21 28	Miles 167.7 91.2 116.5 154.7	5.99 5.07 5.55 5.53	0.83 0.99 0.90 0.90
2	1	29	29	153.7	5.30	0.94
	30	61	32	164.2	5.13	0.97
	62	87	26	151.8	5.84	0.86
3	1	24	24	120.7	5.03	0.99
	29	67	39	228.3	5.85	0.85
	69	87	19	107.0	5.63	0.89
4	1	20	20	118.4	5.92	0.84
	22	52	31	178.0	5.74	0.87
	53	89	37	219.0	5.92	0.84
5	1	24	24	149.5	6.23	0.80
	25	47	23	138.3	6.01	0.83
			10 Meters			
1	Fusee wire to 17 36 60	Couled - No sau 34 58 90	mples 18 23 31	91.2 116.5 154.7	5.07 5.07 4.99	0.99 0.99 1.00
2	1	28	28	153.7	5.49	0.91
	30	61	32	164.2	5.13	0.97
	62	87	26	151.8	5.84	0.86
3	1	23	23	120.7	5.25	0.95
	27	67	41	228.3	5.57	0.90
	69	87	19	107.0	5.63	0.89
4	1	21	21	118.4	5.64	0.89
	23	57	35	178.0	5.09	0.98
	58	98	41	219.0	5.34	0.94
5	Gear fouled	- No samples				

Table 17.--Gauze section data on Hardy Plankton Recorders towed at surface and 10 meters, Albatross III cruise no. 61, May 16-28, 1955

Loading	Gauze section Start Finish		Number of sections	Distance	Section	Conversion
number	Start	Finish	exposed	travelled	equivalent	no./5 mi.
			Surface			
1	1 30	20 50	20 21	Miles 129.5 174.3	6.48 8.30	0.77 0.60
2	1	31	31	176.3	5.69	0.88
	33	61	29	175.3	6.04	0.83
	63	82	20	113.5	5.68	0.88
3	1	30	30	182.3	6.08	0.82
	33	66	34	185.7	5.46	0.92
	69	89	21	117.8	5.61	0.89
4	1	27	27	172.5	6.39	0.78
	29	49	21	118.0	5.62	0.89
	57	86	30	175.5	5.85	0.85
5	1	29	29	165.3	5.70	0.88
	31	62	32	174.2	5.44	0.92
	65	96	32	171.5	5.36	0.93
6	1	28	28	159.8	5.71	0.88
	31	64	34	186.5	5.49	0.91
	66	86	21	110.0	5.24	0.95
7	1	27	27	134.3	4.97	1.01
			10 Meters			
1	1	27	27	129.5	4.80	1.04
	40	62	23	174.3	7.58	0.66
2	1	33	33	176,3	5.34	0.94
	35	65	31	175.3	5.66	0.88
	67	87	21	113.5	5.41	0.92
3	1	33	33	182.3	5.52	0.91
	37	70	34	185.7	5.46	0.92
	72	93	22	117.8	5.35	0.93
4	1	32	32	172.5	5.39	0.93
	41	62	22	118.0	5.36	0.93
	66	97	32	175.5	5.48	0.91
5	1	31	31	165.3	5.33	0.94
	35	65	31	174.2	5.62	0.89
	57	100	34	171.5	5.04	0.99
6	Tows 1 and 2	 Fusee wire br 21	oke - No sampl 21	es - Recorder	reloaded 5.24	0.95
7	25	52	28	134.3	4.80	1.04



